From:

Local Ibew 246

To:

<u>AskOE</u>

Subject:

Federal Power Act 202(c)

Date: Attachments: Thursday, April 19, 2018 2:27:38 PM IBEW LU 246 comments to FERC.pdf

Dear Members of the Committee:

I have attached my previous comment letter of October 16, 2017 concerning base load generation to support the resiliency of the nations power grid.

I would like to reiterate my request to support the continued operation and financial support of the existing operating coal and nuclear power generation facilities. Should this unprecedented period of low gas prices disappear within the next decade the security of our nation and the financial security of our homes and communities will face irreparable harm should one industry have a monopoly on our power supply. What will we, the consumer, do when this occurs?

Thank you for your consideration of these comments and I urge you to issue an emergency order pursuant to the Federal Power Act Section 202(c) before it is too late to save our base load reserve.

Very sincerely yours,

Kyle N. Brown Business Manager 740-282-7572 office 740-282-4425 fax union@ibew246.com

International Brotherhood of Electrical Workers

Local Union No. 246 · Established April 4, 1902

Telephone (740) 282-7572 Fax (740) 282-4425



P.O. Box 188 626 N. Fourth Street

Steubenville, Ohio 43952

October 16, 2017

Federal Energy Regulatory Commission Secretary of the Commission 888 First Street, NE Washington, DC 20426

Re:

Grid Resiliency Pricing Rule FERC Docket No. RM18-1-000

COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, LOCAL UNION 246 (IBEW LU 246) IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW LU 246 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of

crucial power plants needed for reliability for some time. FERC has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Kyle N. Brown
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II. DESCRIPTION OF IBEW Local 246

We are a labor organization, representing over two hundred and fifty skilled electricians and their families in the Upper Ohio Valley.

III. DESCRIPTION OF IBEW LU 246'S INTEREST IN PROCEEDING

IBEW LU 246 is a party to a collective bargaining agreement with the National Electrical Contractors Association, Steubenville Division, who service baseload coal and nuclear power plants located in Ohio and West Virginia. Our members work on major infrastructure and industrial development projects that are dependent on the continued operation of the baseload coal and nuclear power plants. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in

this proceeding. Thus, IBEW LU 246 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW LU 246 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Ohio electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Ohio. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Ohio provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW LU 246 members. The First Energy, W.H. Sammis Plant and the American Electric Power, Cardinal Plant directly employs approximately one thousand people, and the maintenance and capital improvement work on these plants supports the local economy by creating well-paying union jobs. In addition, the plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. IBEW LU 246 provides over one hundred construction and maintenance workers servicing these facilities. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive

economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled Electricians, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW LU 246 strongly urges FERC to adopt the rule proposed by the DOE as promptly and

comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by the comments considered in this proceeding. FERC has thoroughly considered the impact of electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system reliability and resilience, and national security, attendant to the premature closure of crucial power plants. Any protracted delay in creating fully compensatory market rules will only exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a rule that is not only compensatory, but comprehensive and enduring. The rules to be issued by operators of organized markets should be fair and transparent, and should ensure that critical power plants can continue to operate for the long-term and without the prospect of repeated re-examination and adjustment to their market compensation. The uncertainty that less than comprehensive and enduring market rules will engender will defeat the very purpose of preserving the extended operation of these much-needed power plants.

Respectfully submitted,

Hle U Brown

Kyle N. Brown

Business Manager

IBEW Local Union 246

From:

Warden, Vickie

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Comments of Murray Energy Corporation in Support of the Request of FirstEnergy Solutions Corporation for

Emergency Order Pursuant to Federal Power Act Section 202(c) Submitted March 29, 2018

Date:

Subject:

Thursday, April 19, 2018 4:19:23 PM

Attachments:

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Comments of Murray Energy in Support of Request for Emergency Order FES w sig.pdf

PERRY FES Sec 202c LTR w sig.pdf

Please find attached for filing the Comments of Murray Energy Corporation in Support of Request for Emergency Order and Motion to Intervene. Thank you.

Vickie Warden

Legal Secretary

Litigation

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BEFORE THE UNITED STATES DEPARTMENT OF ENERGY

REQUEST OF FIRSTENERGY SOLUTIONS CORPORATION FOR EMERGENCY ORDEF		DOCKET NO. EO-18-
PURSUANT TO FEDERAL POWER ACT)	
SECTION 202(C) SUBMITTED MARCH 29,)	
2018)	

COMMENTS OF MURRAY ENERGY CORPORATION IN SUPPORT OF REQUEST FOR EMERGENCY ORDER AND MOTION TO INTERVENE

I. STATEMENT OF SUPPORT

On March 29, 2018, FirstEnergy Solutions Corporation ("FirstEnergy Solutions"), on behalf of its named subsidiaries, requested that the Secretary of Energy ("Secretary") find that an emergency condition exists in the footprint of the PJM Interconnection L.L.C. ("PJM") which requires immediate intervention by the Secretary in the form of a Section 202(c) emergency order. The request is made pursuant to Section 202(c) of the Federal Power Act ("FPA"), 16 U.S.C. §824a(c), Section 301(b) of the Department of Energy ("DOE") Organization Act, 42 U.S.C. §7151(b), and certain of DOE's Rules of Practice and Procedure, 10 CFR §§205.370-205.373. FirstEnergy Solutions requests a Section 202(c) emergency order directing: "(a) certain existing nuclear and coal-fired generators in PJM, as detailed herein, to enter into contracts and all necessary arrangements with PJM, on a plant-by-plant basis, to generate, deliver, interchange, and transmit electric energy, capacity, and ancillary services as needed to maintain the stability of the electric grid and (b) PJM to promptly compensate at-risk merchant nuclear and coal-fired power plants for the full benefits they provide to energy markets and the public at large, including fuel security and diversity, as detailed herein."

Murray Energy Corporation ("Murray Energy") is the largest underground coal mining company in the United States and the largest employer of coal workers in the United States in the underground mining industry, with over 5,600 employees. Murray Energy and its subsidiary companies currently operate fifteen (15) coal mines, consisting of eleven (11) underground longwall mining systems and forty-six (46) continuous mining units in Ohio, Illinois, Kentucky, Utah and West Virginia. Murray Energy produces approximately 75 million tons of bituminous coal each year. It supplies coal to many of the largest coal-fired utility generating facilities in the U.S., and specifically within the PJM footprint. Notably, Murray Energy supplies coal for use in electricity production at FirstEnergy Solutions' W. H. Sammis and Bruce Mansfield plants.

Murray Energy strongly and enthusiastically supports FirstEnergy Solutions' request for a Section 202(c) emergency order. FirstEnergy Solutions' March 29, 2018 request makes a compelling and well-documented case for the emergency order. The relief requested is within the Secretary's legal authority under Section 202(c) and is justified under the dire and extreme circumstances that threaten the continued viability of baseload, coal fired generation in the PJM footprint, the safety and reliability and economics of the PJM regional grid and the Nation's vast coal resources in the Midwest.

To the extent appropriate, Murray Energy also moves to intervene in this matter.

II. MURRAY ENERGY'S VITAL INTEREST IN THIS ACTION

President Trump has vowed to preserve coal jobs and low-cost, reliable and fuel source electricity for all Americans, including retirees on fixed incomes, single mothers, and manufacturers who depend on low-cost electricity to produce their products. On March 28, 2017, President Trump issued his Energy Independence Executive Order 13783 which affirms the "national interest to provide clean and safe development of our Nation's vast energy

resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation." Executive Order 13783, Section 1(a). Executive Order 13783 specifically directed the U.S. EPA to review and initiate reconsideration proceedings to "suspend, revise, or rescind" the Obama Clean Power Plan as appropriate and consistent with law." <u>Id.</u>, Section 4(a) – (c). In response, the U.S. EPA has proposed the repeal of the Obama Clean Power Plan in Docket No. EPA-HQ-OAR-2017-0355. Murray Energy supports the U.S. EPA action as a necessary and well-deserved first step to protect and preserve coal-fired, baseload generation and to promote the national interest in the Nation's yast coal resources.

However, the U.S. EPA's first step in Docket No. EPA-HQ-OAR-2017-0355 to repeal the Obama Clean Power Plan will go for naught unless federal agencies take a concerted, coordinated and aggressive course of action to protect and preserve the Nation's valuable coal-fired and nuclear generation capacity, including most notably that within the Midwest and the PJM grid, a regional grid that serves a significant proportion of the Nation's industrial, commercial, residential and national defense electricity consumers that depend upon a safe, reliable, and economic source of electricity generation.

Murray Energy has a vital interest in FirstEnergy Solutions' request for an emergency order under Section 202. Murray Energy was established in 1988 when Mr. Robert E. Murray mortgaged virtually everything he owned and purchased a single coal mine in Southern Ohio. Thirty years later, Murray Energy is the largest underground coal mining company in the U.S. As stated, Murray Energy is the largest employer of coal workers in the United States in the underground mining industry, with over 5,600 employees. Murray Energy and its subsidiary companies currently operate fifteen (15) coal mines, consisting of eleven (11) underground

longwall mining systems and forty-six (46) continuous mining units in Ohio, Illinois, Kentucky, Utah, and West Virginia. Murray Energy produces approximately 75 million tons of bituminous coal each year and supplies coal to many of the largest coal-fired electric utility generating facilities in the United States.

Murray Energy is also engaged in related business operations and activities, including owning and operating four (4) mining equipment manufacturing and rebuild facilities along with a number of river, truck and rail terminals, and twenty-five (25) river towboats and over 500 coal barges on the inland waterway system. Many of Murray Energy's mining complexes are strategically located near its customers' electric generating stations, and all have excellent, low cost transportation infrastructures to Murray Energy's markets. The vast majority of the coal produced from Murray Energy's mines in the U.S. is used for the generation of electricity. Murray Energy is dependent on the continuing viability and operation of coal-fired generation in the United States.

Murray Energy specifically supplies coal to FirstEnergy Solutions' W.H. Sammis and Bruce Mansfield plants and Allegheny Energy Supply Company's Pleasants Power Station. Murray Energy is under contract to provide 6,500,000 tons of coal per year to the W.H. Sammis and Bruce Mansfield plants through 2028¹. Murray Energy is also under contract to provide 250,000 tons of coal to the Pleasants Power Station in 2018.

Given the current threats to coal-fired generation, Murray Energy, along with other coal producers and related industries, and numerous generating companies and electric utilities, are threatened with bankruptcy and significant economic harm if coal-fired capacity is forced out of the market and prematurely closed. Under the Obama Administration, over 531 coal-fired

¹ Murray Energy received a Notice of Reduction in Generation Capacity from FirstEnergy Generation, LLC dated March 23, 2018 stating that the 2018 tonnage will be reduced from 6,500,000 to 2,200,000 tons.

generating plants, or 59,000 megawatts of generating capacity through 2016, were closed prematurely, many as a result of new and potential regulations that were put into place illegally, without proper cost analysis, and without proven environmental benefits. Further, an additional 12,700 megawatts of coal fired-generation will be closed by the end of 2020, bringing coal's share of electricity to as low as twenty-seven percent (27%). These closures are the functional equivalent of entirely eliminating the combined electricity supplies of Ohio, Pennsylvania, Indiana, and West Virginia. In the PJM footprint alone, which covers all or part of thirteen (13) states and sixty-five (65) million people, 11,000 megawatts of coal-fired electricity generation has been closed over the past four (4) years. In addition, 20,056 megawatts of this baseload capacity in PJM is contemplated for closure.

This devastation has had, and will continue to have, far-reaching consequences for the United States. As well documented by FirstEnergy Solutions, numerous coal-fired and nuclear plants in PJM have announced that they are financially challenged and are closing or contemplating closure. FirstEnergy Solutions itself has now filed for bankruptcy. By early 2016, the total value of the American coal industry had declined from \$68.8 billion five (5) years before to \$4.08 billion, a ninety-four percent (94%) reduction in value. A total of fifty-two (52) coal companies were in bankruptcy proceedings with only four (4) major companies remaining financially solvent. Local rural communities in coal producing regions, and in areas that depend on coal-fired power plants, are losing jobs and millions of dollars in local tax support due to the closure of coal-fired generation plants. This devastates the residents and the employees supporting local businesses, governments, and school districts.

Given the dire and extreme circumstances fully documented in FirstEnergy Solution's March 29, 2018 request for emergency order, it is absolutely imperative that the Secretary immediately issue the requested Section 202 emergency order.

III. THE SECRETARY HAS THE LEGAL AUTHORITY TO ISSUE THE REQUESTED SECTION 202 EMERGENCY ORDER

Pursuant to Section 202(c) of the Federal Power Act (16 U.S.C. §824a (c)), the Secretary of the U.S. Department of Energy has the authority, whenever the Department determines that an "emergency exists by reason of . . . a shortage of electric energy or of facilities for the generation . . . of electric energy . . . ," to issue an emergency order to prevent an electric generation plant from shutting down:

(c) Temporary connection and exchange of facilities during emergency

During the continuance of any war in which the United States is 1) engaged, or whenever the Commission determines that an emergency exists by reason of a sudden increase in demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes, the Commission shall have authority, either upon its own motion or upon complaint, with or without notice, hearing, or report, to require by order such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy is in its judgment will best meet the emergency and serve the public interest. If the parties affected by such order fail to agree upon the terms of any arrangement between them in carrying out such order, the Commission, after hearing held either before or after such order takes effect, may prescribe by supplemental order such terms as it finds to be just and reasonable, including the compensation or reimbursement which should be paid to or by any such party. (emphasis added).

The Secretary's authority and discretion under Section 202(c) is very broad and the duration for action is not limited. Section 202(c) empowers the Secretary to act "whenever [he] determines that an emergency exists by reason of "certain specified market conditions or other

causes" to order actions "as in [his] judgment will best meet the emergency and serve the public interest." 16 U.S.C. §824a (c)(1).

DOE's regulations define emergency broadly, stating that an emergency "can result from a sudden increase in customer demand, an inability to obtain adequate amounts of the necessary fuels to generate electricity, or a regulatory order which prohibits the use of certain electric power supply facilities. 10 CFR §205.371, defines "emergency" and provides:

§ 205.371 Definition of emergency. ("Emergency," as used herein, is defined as an unexpected inadequate supply of electric energy which may result from the unexpected outage or breakdown of facilities for the generation, transmission or distribution of electric power. Such events may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected "entity" to prevent. An emergency also can result from a sudden increase in customer demand, an inability to obtain adequate amounts of the necessary fuels to generate electricity, or a regulatory action which prohibits the use of certain electric power supply facilities. Actions under this authority are envisioned as meeting a specific inadequate power supply situation. Extended periods of insufficient power supply as a result of inadequate planning or the failure to construct necessary facilities can result in an emergency as contemplated in these regulations. In such cases, the impacted "entity" will be expected to make firm arrangements to resolve the problem until new facilities become available, so that a continuing emergency order is not needed. Situations where a shortage of electric energy is projected due solely to the failure of parties to agree to terms, conditions or other economic factors relating to service, generally will not be considered as emergencies unless the inability to supply electric service is imminent. Where an electricity outage or service inadequacy qualifies for a section 202(c) order, contractual difficulties alone will not be sufficient to preclude the issuance of an emergency order.)

Section 205.373 specifies the information required to be submitted. FirstEnergy Solutions has more than adequately addressed these requirements at pages 27-31 of the March 29, 2018 request.

IV. FIRSTENERGY SOLUTIONS HAS FIRMLY ESTABLISHED THAT AN EMERGENCY EXISTS UNDER SECTION 202 DUE TO THE RECENT AND IMMINENT CRITICAL REDUCTION IN NUCLEAR AND COAL-FIRED GENERATION CAPACITY

It is imperative that the Secretary act expeditiously to grant the relief requested by FirstEnergy Solutions to ensure continued operation of a secure and diverse electric generation fleet to secure reliable, efficient and cost-effective supplies of electricity in the PJM footprint.

This action is one of the most important actions presented to the Secretary for his consideration. During the past six years, close to 58,000 MW of highly dependable baseload generating capacity with stable cost structures and on-site fuel supply have been retired. Most of these generating units burned coal, but almost 5,000 MW of nuclear capacity also have been shut down. Prior to retirement, these generating units accounted for eighteen percent (18%) of total baseload generating capacity in the United States, routinely generating 2,555,000 GWh of electricity per year. The replacement cost for this generation is more than \$100 billion. Approximately another 30,000 MW are currently scheduled to be retired. Despite this fact, neither FERC nor PJM have ever systematically examined in depth the impact of these retirements on grid resilience, the vulnerability to severe price spikes, or the ability to keep electricity costs at reasonable levels on a long-term basis.

A. Continued Operation of American's Coal-Fired Electricity Generation Fleet in the PJM Grid is Absolutely Vital to Ensuring Reliable, Efficient and Cost-Effective Supplies of Electricity to the Region

America enjoys an abundant resource of proven coal reserves. Coal is a critical component of America's energy resources and continued operation of America's coal-fired

electricity generation fleet in the PJM grid is absolutely vital to ensuring reliable, efficient and cost-effective supplies of electricity to the region.

For over a century, coal-fired generation has been the safe, reliable, low-cost, and fuel-secure source of electricity in America, providing the baseload generation, as well as the capacity, reserve, and ancillary services that are absolutely necessary to maintain the integrity and reliability of our Nation's power grids. The historical fleet of coal-fired generating units, particularly in the Midwest, has served the economy well, providing as much as eighty to ninety percent (80 - 90%) of in-state generation in many states over the years. Coal-fired generation has also served the commercial, manufacturing and industrial sectors of this Country, providing low-cost, reliable, high capacity and peak demand services that are absolutely necessary for American manufacturers to operate and to compete in the global marketplace.

Over the years, coal-fired generation has been less susceptible than other sources to both short-term and long-term fuel price variation and supply. Coal-fired generation has been the constant through the years of the Arab oil embargo, the natural gas shortages of the 1970's and 1980's, the ensuing volatility in natural gas prices thereafter, nuclear power regulatory challenges, and extreme weather conditions, most recently the 2014 Polar Vortex and 2018 Bomb Cyclones.

There is no better illustration of the need to protect baseload generation than the so-called "Bomb Cyclone," which immersed the eastern United States in extremely cold, windy conditions from December 27, 2017 through January 8, 2018. Notwithstanding that this cold snap occurred primarily over the holidays, at least two (2) million Americans lost their power, and, tragically, twenty-two (22) people lost their lives. Without the electricity provided by our coal-fired and

nuclear power plants, the devastation of this very short twelve (12) day Bomb Cyclone would have been far worse.

The United States Department of Energy's National Energy Technology Laboratory recently issued a report ("Government Study") analyzing the reliability and resiliency of different sources of electricity generation during the Bomb Cyclone. The Government Study confirmed what many of us have already known, that coal was the single most reliable and resilient form of electricity production during that critical time. Coal and nuclear power provided eighty-nine percent (89%) of the electricity during this Bomb Cyclone. During this time coal-fired generation averaged an output level of 46,038 megawatts, over fifty percent (50%) greater than the average of 29,849 megawatts. Indeed, if it were not for the electricity generated by our Nation's coal-fired power plants, with ample capacity and on-site fuel availability, the grids would have experienced a massive nine (9) to eighteen (18) gigawatts of shortfall, leading to system collapse.

During this cold snap, coal far outperformed all other fuel sources, particularly natural gas and renewables. At least 37,000 megawatts of supposedly available natural gas-powered electricity was entirely unavailable due to the priority for home heating use and frozen natural gas pipelines. Where natural gas was available, prices peaked at over \$95 per million BTU in the PJM, and over \$175 per million BTU in New York City, which is sixty (60) times the normal cost. Also, during this time, the cost of electric power from natural gas-fired plants peaked at over \$500 per megawatt hour, compared to a predominant rate of about \$28 per megawatt hour. The ISO New England regional transmission organization has confirmed that their region is at major risk of fuel insecurity and it currently has no defined solution, due to New England's

dependence on natural gas relying on 'just in time' delivery and the retirement of coal and nuclear generating capacity with 70-80 day supply of coal stored in stockpiles on site.

Similarly, wind turbines and solar panels contributed virtually nothing to our Country's electricity needs at that dire time, as cloud cover and wind speeds caused these resources to be unable to dispatch. The Government Study concluded that wind energy was down twelve-percent (12%) across the eastern United States. When considered together, wind and solar electricity generation declined nineteen percent (19%) in Midcontinent Independent System Operator ("MISO"), twenty-nine percent (29%) in Southwest Power Pool ("SPP") and thirty-two percent (32%) in Electric Reliability Council of Texas ("ERCOT"). Fortunately, coal-fired electricity was able to step up and to fill the void for seventy-four percent (74%) of this incremental lost generation.

The Government Study valued the resilience provided by coal at \$3.5 billion in the PJM market alone, which equates to \$288 million per day. PJM's President and CEO, Mr. Andrew Ott, recently stated that 1,410 megawatts of nuclear capacity and 3,688 megawatts of coal-fired capacity that operated during the recent cold snap in the eastern United States are scheduled to be deactivated within the next five (5) years.

These problems from the recent cold snap were not an isolated incident. During the so-called "Polar Vortex" of early 2014, PJM came within 500 megawatts of a major system disruption on a demand of 140,000 megawatts. A total of 9,300 megawatts of supposedly available natural gas-fired generation was not available due to gas supply disruptions to the generators. Further, the cost of producing electricity in the Midwest and Mid-Atlantic area rose above \$1,000 per megawatt-hour for the first time in American history.

During this time, an Ohio-based electric power company was ordered by the State's Public Utility Commission to be connected to 3,800 megawatts of wind and solar power. Only fifteen (15) megawatts of the 3,800 megawatts were available during the crisis. What the utility relied on during the cold snap was 8,170 megawatts of coal-fired generation. As all 8,170 megawatts have been closed, what will happen next time?

The recent Bomb Cyclone and 2014 Polar Vortex demonstrate that our electric power grids are not as resilient and reliable as the independent power grid operators, some electric utilities, and the Federal Energy Regulatory Commission ("FERC") claim. Indeed, we have a power grid reliability and resiliency crisis in much of America. But, will a system collapse occur before they recognize and do something about it?

During the 2018 Bomb Cyclone, the consequence of lack of fuel diversity was seen in New England ISO ("NE ISO") pricing. Comparing the first half of January 2018 to the first half of January 2017, natural gas prices (Algonquin hub) were up from an average of \$5.60 per MMBtu in 2017 to \$22.78 per MMBtu in 2018, a 307 percent increase. Power prices (Mass Hub) were up from an average of \$41.80 per megawatt-hour to \$147.74 per megawatt-hour, a 253 percent increase. Also relevant was the over 7000 percent increase in use of oil for power generation as a result of supply constraints on natural gas due to the lack of storage and pipeline capacity. Dual fuel gas and oil plants had to switch to oil to meet load. Pricing was also up in PJM West, which had an average energy price of \$119.53 per megawatt-hour in the first half of January 2018. The average energy price and price increases were higher in NE ISO than PJM West because the coal generation in PJM increased by about 10 percent in the first half of January 2018 which significantly reduced the increased generation required from oil. There is

no question that had it not been for the coal capacity in PJM, MISO and elsewhere the power prices would have been significantly higher.

As addressed by FirstEnergy Solutions, numerous baseload plants in PJM have announced that they are financially challenged and are closing or contemplating closure. If action is not immediately taken, thousands of additional megawatts of reliable baseload capacity will retire leaving PJM without fuel-secure baseload resources. These closures include:

- FirstEnergy Solutions, which through Applicants indirectly owns 12,300 MW of generation, has now filed for bankruptcy. Multiple plants are at risk for permanent closure as a result of this expected action.
- FirstEnergy Solutions submitted notices to PJM on March 28, 2018, that it would deactivate its three nuclear plants, Davis-Besse (908MW), Perry (1,268 MW), and Beaver Valley (1,872 MW), by 2021.
- FirstEnergy Corp. announced that Units 5-7 at the W.H. Sammis coal-fired plant (1,490 MW) are in danger of being closed. The company previously announced that Units 1-4 (720 MW) will close by May 2020.
- FirstEnergy Corp. has announced that the 2,510 MW Bruce Mansfield coal-fired plant is at risk of closure due to the exposure to changing market conditions.
- Allegheny Energy Supply Company, LLC, a FirstEnergy Corp. subsidiary, recently submitted a deactivation notice for Pleasants Power Station, a 1,300 MW coal-fired plant in West Virginia.
- Dayton Power & Light has announced the closure by June 2018 of the J.M. Stuart coal-fired plant (2,318 MW) and the Killen Station Unit 2 coal-fired plant (600 MW), citing market conditions making the plants not economically viable. Stuart Unit 1 was closed even earlier, on September 30, 2017.
- Owners of the 1,884 MW Homer City coal-fired power plant attempted to sell the plant in 2016, but were unable to find a buyer; Standard & Poor's analysts cite lower power prices and increasing expenses as driving forces behind the facility's ills.
- Westmoreland Partners recently announced the sale or closure of the 209 MW Roanoke Valley coal-fired power plant. As anticipated, on March 1, 2017, these units retired.

- Exelon has announced that it will close the Oyster Creek nuclear plant (608 MW) in October 2018 a decade before the end of its operating license citing negative economic factors.
- Exelon has announced the premature closure of the 837 MW Three Mile Island nuclear power plant in September 2018, citing deteriorating economic value.

(March 29, 2018 Request, pp. 20-22)

Renewable energy sources are not a viable or credible alternative to baseload coal-fired generation. Wind and solar generation sources are intermittent and unreliable and therefore cannot be relied upon to meet peak or base load demand. Without the price support provided by the Wind Production Tax Credit, wind generation will be a high cost resource. Natural gas-fired generation is not the answer either, as gas pricing is volatile and gas supply is unreliable given limited gas storage capacity, pipeline limitations and a requirement to meet residential and commercial customer requirements ahead of power generation.

As asserted by FirstEnergy Solutions, PJM itself has recognized the need for resiliency. Fuel diversity and resiliency are key components of a resilient grid.

PJM itself has recognized the need for resiliency, finding that, "[i]n addition to delivering energy services reliably during strained system conditions, to which probabilities can be attached, e.g., plant outages, weather variability), a resilient energy system also must be resistant to larger scale shocks to which it is difficult to attach probabilities" PJM recently concluded that "reliability attributes supplied through generation and other resources . . . support reliability" and "the maintenance or assurance of these attributes into the future are important to resilience mitigation." Fuel diversity and security are key components of a resilient grid. PJM acknowledged the connection between diversity and resiliency when it committed to "analyz[ing] future trends in resource mix and their impacts on both reliability and resilience." As PJM's market monitor stated, "[s]ignificant reliance on specific fuels, including nuclear, coal and gas means that markets are at risk from a significant disruption in any one fuel." (March 29, 2018 Request p, 23).

NERC also recognizes the critical contributions of nuclear and coal-fired generation to the electric grid. As FirstEnergy Solutions states:

NERC goes further, recognizing not only the importance of fuel diversity in maintaining a resilient energy system, but also the critical contributions of nuclear and coal-fired resources to mitigating risks to the electric grid. Overreliance on natural gas, by contrast, increases risk to the electric grid because, as NERC states, "within a relatively short time, a major failure" in the natural gas transmission system "could result in loss of electric generating capacity that could exceed the electric reserves available to compensate for these losses." As explained by Dr. Henry Chao, Executive Advisor and Vice President at Quanta Technology and former Vice President at New York Independent System Operator ("NYISO"): "Abundant supplies of natural gas provide many advantages to electric consumers, but . . . natural gas delivery systems lack the reliability and redundancy of the bulk electric system. Specifically, there are no systematic reliability criteria for natural gas delivery system planning and operations; whereas the electric power industry has mandatory reliability standards that are developed and enforced by NERC." (March 29, 2018 Request, p. 23)

Murray Energy fully endorses FirstEnergy Solutions' conclusion that unless immediate action is taken, the continued retirement of nuclear and coal-fired generating units will invariably lead to increased electric price volatility, lessened grid resiliency and dependability, uncertain electric security, economic instability and job losses. FirstEnergy Solutions states it best:

Unless immediate action is taken, the continued retirement of nuclear and coal-fired generating units — by breeding greater dependence on generation fueled by natural gas, which is subject to supply disruptions, constrained pipeline capacity, a general inability to store fuel on-site, and competing demand for consumer heating in winter months — will increasingly result in significant, negative outcomes for the approximately 65 million people living and working within the PJM footprint. These harmful consequences include increased electric price volatility, lessened grid resilience and dependability, uncertain electric security in the future, decreased economic stability, and severe job losses — especially in the coal sector — as both power plants and fuel suppliers declare bankruptcy and cease operations. Combined, these conditions are potentially disastrous for the electric grid and the economy. PJM itself recently found that as the "resource mix moves in the direction of less coal and nuclear generation, generator reliability attributes of frequency response, reactive capability and fuel assurance decrease" (March 29, 2018 Request, p. 24).

B. At-Risk Merchant Nuclear and Coal-Fired Plans Must Be Compensated For the Benefits of Resiliency and Diversity Provided to the Grid.

FirstEnergy Solutions is absolutely correct in asserting that at-risk merchant nuclear and coal-fired plants must be compensated for the benefits of resiliency and diversity provided to the grid. Neither FERC nor PJM have addressed these important issues. Further delay will continue to devastate the reliability of the grid and cannot be tolerated.

A recent study performed by the leading global economic consulting firm, IHS-Markit concludes that, on a going forward basis (excluding sunk costs), the costs of continuing to operate many recently-retired coal-fired plants is significantly lower than the long-term marginal cost of building new generation.² In some instances, on a properly-calculated apples-to-apples basis, the cost of electricity generated by a newly-constructed power plant may be approximately twice that of a baseload coal or nuclear plant that has recently retired.3

Furthermore, baseload coal and nuclear plants typically operate at high capacity factors and have stable operating costs because fuel can be purchased under long-term contracts with fixed pricing. As such, coal plants are valuable assets which limit exposure to price spikes, keep electricity costs at reasonable levels and historically have been the backbone of the operation of the grid. From an economic standpoint, it seldom should make sense to shut down these generating units, especially since, once shut down, these generating units are permanently lost. Yet that is precisely what is occurring today.4

A related problem that will worsen with further retirements of baseload coal and nuclear plants will be the increased frequency, severity, and duration of price spikes that will arise with

² IHS Markit, Ensuring Resilient and Efficient Electricity Generation: The Value of the current diverse US power supply portfolio, at p. 8 (Sept. 2017) (hereinafter, "IHS Study").

⁴ Many of the companies that historically have been leaders in electric generation, such as AEP, Duke, NRG and Calpine, have announced that, except for generating units supported by long-term Purchase Power Agreements, they will no longer build new merchant generation and, in several instances, are liquidating their entire merchant generation portfolio. This is reducing the number of experienced players interested in continuing to own and operate generation. In addition, negative energy prices primarily as a result of wind production tax credits are becoming increasing prevalent, with crushing impacts on every type of base load.

increased dependence upon natural gas. In particular, during the past several years the ability of grid operators to shift back and forth between natural gas-fired generation and coal-fired generation has played an increasingly critical role in managing price volatility. When gas prices rise, coal generation increases; when gas prices fall, coal generation declines. With additional coal plant retirements, however, the ability to reduce gas use by increasing use of coal-fired capacity declines, reducing the amount of available fuel switching by a startling 11 BCF/day in the past six years.⁵ As a result, natural gas price increases are expected as coal generation is not available to cap gas demand and price.

Further, the reduced potential for fuel switching is not the only change that is occurring that could cause adverse volatility and price spikes. LNG exports from the U.S. began in earnest in 2016 with the completion of the Sabine Pass facility which reached 2 billion cubic feet per day ("BCFD") by year end. Another six plus BCFD of LNG capacity is under construction and 13.5 BCFD of LNG capacity is in advanced development.⁶ As exports of LNG grow, natural gas pricing is expected to increasingly be affected by the global price, thereby increasing volatility and making it even more important to keep existing coal-fired units online in order to maximize the availability of fuel switching.

IHS calculates that retirement to the existing coal and nuclear generation capacity would result in an increase of retail power prices by about 25 percent and net consumer costs by about \$98 billion per year. Therefore, failure to maintain the resource diversity by prematurely retiring nuclear and coal baseload units could, extrapolating over the next 20 years, increase electricity costs by as much as \$2 trillion. These effects are magnified further as soaring

⁵ ABB. Actual and Projected Coal Capacity Retirements in the United States, 2011-2020, Ventyx Database, October 18, 2017.

⁶ EVA, Quarterly LNG Outlook, December 2017.

⁷ IHS Study at 5, 37-38.

electricity costs ripple through the broad economy, with large adverse impacts over the three year period on U.S. GDP (a loss of 0.8%), on real disposable income (a drop of about \$845 per household in 2016 dollars), and jobs (a loss of 1 million).⁸

Every time additional coal-fired generation is retired, the vulnerability to frequent and severe natural gas and electricity price spikes rises, since the natural gas price increase required to induce sufficient fuel shifting to balance the market continues to increase. As a result, in any winter as cold or colder as the winter of 2013-14, the potential natural gas price increase required to balance the market could be as much as two to three times as great as in the Polar Vortex winter.

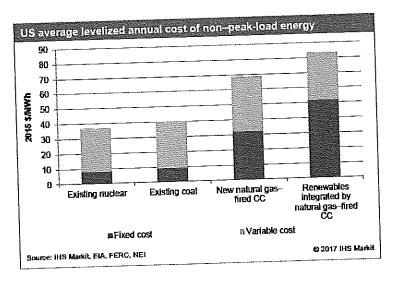
It is a bedrock principle of power supply planning and cost-effective risk management that maintaining resource diversity (creating optionality) has significant, tangible economic value. Putting "all of one's eggs in one basket" seldom makes sense. FERC openly acknowledges, however, that its current rules fail to take this principle into account, turning a blind eye towards this issue. Instead, its rules focus strictly on short-term marginal costs – i.e., day-ahead or same-day energy pricing and capacity payments based upon expected needs three years out.

This rigid focus on short-term marginal costs gives generation owners an incentive to focus only on maximizing short-term operating margins, *not* on maximizing operating efficiency over the seven to twelve year planning horizon required for investments in new baseload generation. The IHS Study highlights the critical importance of this issue. IHS estimates that over the past three years, maintaining a diverse generating mix has saved electricity users an average of \$98 billion/year – i.e., extrapolated out over a twenty (20) year period, potentially as much as \$2 trillion.

⁸ HIS Study at 5, 39.

The recent September 2017 IHS Study shows that a diverse portfolio of generation resources that include baseload coal and nuclear units is necessary to ensure that electricity prices remain at reasonable levels on a long term basis. As articulated in the IHS Study, a cost effective electrical power supply portfolio integrates available generation technologies – intermittent renewables, gas turbine, gas combined cycle, and baseload nuclear and coal – to meet consumer demand at the lowest overall cost. Because fifty percent (50%) of consumer demand is constant, day or night, winter or summer, baseload nuclear and coal plants are the most cost-effective resources to serve this portion of the electrical load.

The figure below from the IHS Study compares the going forward costs for existing coal and nuclear power baseload generation to the cost of replacement of this generation with (1) natural gas-fired combined cycle generation and (2) a mix of intermittent wind and solar resources integrated with natural gas-fired combined cycle generation.⁹



This comparison shows that replacing existing coal and nuclear generation with natural gas and intermittent renewable generation would cost approximately double the cost of the existing coal and nuclear generation. The IHS Study notes that, as a result, the continued

⁹ IHS Study at 36.

retirement of baseload coal and nuclear units could result in significantly eroding consumer net benefits, stating as follows:

The current accelerated turnover of generating resources in the US power supply portfolio is eroding the net benefit to US consumers from electricity consumption. The potential exists for current trends to lead to a less diverse supply portfolio made up of no nuclear, coal, or oil generating resources and 20% less hydro capacity, with the rest of generation made up of wind and solar resources integrated with natural gas—fired generating technologies in proportions reflecting the current mix of these technologies and fuel sources in the new power supply pipeline. ¹⁰

IHS calculates that this would result in an increase of retail power prices by about 25 percent and net consumer costs by about \$98 billion per year. Therefore, failure to maintain the resource diversity by prematurely retiring nuclear (and coal) baseload units could, extrapolating over the next 20 years, increase electricity costs by as much as \$2 trillion. These effects are magnified further as soaring electricity costs ripple through the broader economy, with large adverse impacts over the three (3) year period on U.S. GDP (a loss of 0.8%), on real disposable income (a drop of about \$845 per household in 2016 dollars), and jobs (a loss of 1 million). 12

As coal capacity is retired at alarming rates, however, the crucial market balancing will cease to be effective. Many coal units scheduled for closure were called upon to meet the exigent circumstances created by the Polar Vortex. If gas-to-coal switching can no longer moderate demand effectively, prices will have to go high enough to shut-in LNG exports — putting U.S. residential, commercial, and industrial end users at the whim of international markets. End users may be subjected to prices of \$10.00/MMBtu or higher for an extended period of time — more than 3-4 times recent levels. With falling diversification in the electricity

¹⁰ IHS Study at 36.

¹¹ IHS Study at 5, 37-38.

¹² IHS Study at 5, 39.

sector and increasing reliance on natural gas, these increased natural gas costs will flow directly into electricity markets, increasing costs sharply.

Future retirements of coal and nuclear generation will only continue to increase demand for natural gas generation and reduce the ability to switch from gas-to-coal in periods of system stress. Absent immediate action, it is entirely plausible that within the next decade an additional 20-25% of coal and nuclear capacity may be retired. This will lead to additional employment loss and will further increase vulnerability of the grid to natural gas price shocks, while at the same time making these shocks significantly more likely by reducing the ability to switch from gas-to-coal during periods of high system stress. Even if these obstacles could be overcome, there will likely be a significantly increased fuel cost for natural gas generators and, by extension, higher prices for electricity.

FirstEnergy Solutions is entirely correct in contending that neither FERC nor PJM have addressed distorted market pricing conditions. Market rates not recognizing the benefit of resiliency and diversity are putting the Nation at risk for astronomical cost increases in the future. Neither FERC nor PJM have addressed the wave of recent and contemplated plant retirements. There has been no effort to address:

- The impact of continued retirement of baseload units on the ability of grid operators to meet voltage support and frequency control requirements or to provide reactive power;
- As detailed above, the potential cost-effectiveness of continuing to operate these plants, compared to the expected cost of new generation that might soon be needed in the regions in which retirements have been occurring;
- The potential long-term costs and price risks for electricity customers of failing to maintain resource diversity; and
- The ability to cost-effectively meet future state or federal environmental requirements that have a significant possibility of occurring within the next 5 to 10 years, if not sooner.

In sum, neither FERC nor PJM have acted to ensure adequacy of service and protect electricity users against long-term wholesale electricity prices that are higher than necessary in a number of specific respects. By failing to properly account for the value of baseload coal and nuclear generation, FERC and PJM have virtually ignored the role of resource diversity as it relates to potential outages, as well as the agencies' key role in maintaining wholesale power rates at just and reasonable levels and ensuring the safety, reliability and dependability of the Nation's electric supply system.

CONCLUSION v.

FirstEnergy Solutions' March 29, 2018 Request For Emergency Relief Under Section 202 is well-supported, justified and should be immediately granted.

On behalf of Murray Energy, and its ownership, management, and employees, we respectfully submit these comments.

Sincerely,

MURRAY ENERGY CORPORATION

Robert E. Murray

Chairman, President and Chief Executive Officer

46226 National Road

St. Clairsville, Ohio 43950

MURRAY ENERGY CORPORATION 46226 National Road St. Clairsville, Ohio 43950

ROBERT E. MURRAY Chairman, President, & Chief Executive Officer

PHONE: (740) 338-3100 FAX: (740) 338-3405 bobmurray@coalsource.com www.murrayenergycorp.com

April 18, 2018

The Honorable James Richard Perry Secretary of Energy United States Department of Energy 1000 Independence Avenue, S.W. Washington, DC 20585

Request of FirstEnergy Solutions Corporation For Emergency Order Pursuant to Re: Federal Power Act Section 202(c) Submitted March 29, 2018

Dear Secretary Perry:

Please find enclosed the Comments of Murray Energy Corporation in support of the above Request For Emergency Order, as well as a Motion to Intervene.

These Comments are filed in support of FirstEnergy Solutions' March 29, 2018 Request For Emergency Order pursuant to Section 202(c) of the Federal Power Act.

Thank you for addressing this matter.

Sincerely,

MURRAY ENERGY CORPORATION

Robert E. Murray

Chairman, President & Chief Executive Officer

REM: jas Enclosure

cc:

Rick C. Giannantonio General Counsel FirstEnergy Solutions

Kelley E. Mendenhall Vice President of Strategy and Planning FirstEnergy Solutions

All Designated Parties of Record

From:

Joseph Talnagi

To:

<u>AskQE</u>

Subject: Date: Assistance for FirstEnergy

Thursday, April 19, 2018 3:47:19 PM

Assistance should be provided to FirstEnergy Corporation to support continued operation of their base load supply capacity, especially for the Davis-Besse, Perry, and Beaver Valley facilities. Nuclear energy generation is the most economical and expeditious approach to providing reliable base load supply while reducing carbon emissions, which surely would increase if the zero-emission nuclear facilities were to be replaced with natural gas-fired capacity. These facilities represent valuable national infrastructure which must be preserved if our nation is to retain the security of a reliable electricity supply. Power grad instability will result if reliable, high capacity-factor facilities such as these were lost.

I must emphasize that any such assistance should not be labeled as a "bail-out". Rather, it is more correctly viewed as a reasonable valuation of the zero-emissions, high reliability electricity supply. The current market structure does not place a reasonable value on these aspects of nuclear generation, which is grossly unfair since other zero-emissions generators of much lower reliability (e.g., wind turbines and PV solar) receive extremely generous subsidies and preferential treatment in the form of tax breaks and mandated capacity percentages (such as from Renewable Energy Portfolio provisions). Likewise, natural gas facilities are not penalized for their carbon emissions, which are significant, nor are they bearing the full costs of environmental damage caused in the extraction step by the near-universal use of fracking gas wells for enhanced production.

While some argue that these DOE provisions should be reserved for use in "true disasters", it is my opinion that preventing "true disasters" is an equally valid argument for invoking the emergency provisions. Surely loss of a reliable and stable electrical grid would be a disaster of monumental proportions if we throw away valuable generating infrastructure for no valid reason.

Thank you for the opportunity to submit my comments.

Joseph Talnagi Dublin, OH

Document 109

From:

UJEP Union

To:

AskOE UJEP Union

Cc: Subject: UJEP Comments on Baseload Power

Date:

Attachments:

Thursday, April 19, 2018 12:45:51 PM UJEP FERC NOPR Comment 101317.pdf

Attached please find comments submitted to the FERC NOPR proceeding by Unions for Jobs & Environmental Progress, an ad hoc association of national labor unions concerned about maintaining fuel diversity and the reliability and resilience of the electric grid.

Eugene M. Trisko Treasurer, UJEP (b) (6) cell

This message is confidential and is intended only for the use of the recipients identified above. If you receive this message by mistake, please delete it.

Unions for Jobs & Environmental Progress

P.O. Box 1446 Olney, MD 20830 ujep4jobs@gmail.com www.ujep4jobs.org

Jim Hunter, IBEW (Ret.) President, UJEP <u>jim@jimhunterllc.com</u> John Risch, SMART-TD Vice President, UJEP <u>irisch@smart-union.org</u>

Federal Energy Regulatory Commission Secretary of the Commission 888 First Street, NE Washington, DC 20426 October 13, 2017

Attn: Docket No. RM17-3-000

Via E-Mail to http://www.ferc.gov

Re:

Proposed Grid Resiliency Pricing Rule

Ladies & gentlemen:

I am writing on behalf of the labor organizations affiliated with Unions for Jobs & Environmental Progress (UJEP). UJEP affiliates represent some 3.2 million workers from the electric utility, mining, rail, transportation, and construction sectors.

Our affiliates' members have been adversely affected by the ongoing transformation of the electric power sector, and the increasing dependence on renewables and natural gas generation. These workers have lost tens of thousands of jobs as a consequence of the recent closures of mines and electric generating plants due to a number of factors, most importantly lower natural gas prices, compounded by the high compliance costs of recent U.S. EPA emissions regulations.

UJEP is an ad hoc association of labor unions involved in energy production and use, transportation, engineering, and construction. Our members are: International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Union; International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers; International Brotherhood of Electrical Workers; International Brotherhood of Teamsters; SMART Transportation Division; Transportation • Communications International Union, IAM; United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada; United Mine Workers of America, and Utility Workers Union of America. For more information about us, visit www.ujep4jobs.org.

We strongly support the proposed Grid Resilience Pricing Rule as an appropriate and well-supported remedy to correct the failure of current market mechanisms to compensate the resiliency and related benefits provided by fuel-secure baseload power generation. We view the proposed rule as an important first step toward stabilizing the diversity and resilience of the generation fleet in competitive markets, and avoiding further job losses due to the premature closures of large coal and nuclear generating plants.

Preliminary analyses by ICF, Inc., indicate that the rule may cost some \$1 to \$4 billion annually, depending on natural gas prices. This is prudent insurance for the critical national security and natural disaster recovery benefits of a stable and resilient electric supply system. The relatively rapid recovery of electric service in many parts of Texas following Harvey was facilitated by the ongoing operation of large baseload nuclear capacity during and after that extreme weather event, despite the loss of more than 7,000 MW of conventional generation capacity. The availability of fuel-secure baseload coal and nuclear capacity was likewise critical to the ability of the eastern interconnect to withstand the extreme load demands of the Polar Vortex.

Our concerns about the steady erosion of the large coal and nuclear baseload power fleet, and its adverse impacts on resiliency and our members' jobs, were expressed in our May 25th letter to Secretary Perry (see attached copy.) We note in summary here key findings of the May 2017 NERC reliability study cited in our letter:

- Conventional units, such as coal plants, provide frequency support services as a function of their large spinning generators and governorcontrol settings along with reactive support for voltage control. ... Coalfired and nuclear generation have the added benefits of high availability rates, low forced outages, and secured on-site fuel. Many months of onsite fuel allow these units to operate in a manner independent of supply chain disruptions. ...
- Fuel diversity provides a fundamental benefit of increased resilience.
 Without this diversity, the impact of rare events impacting availability of resources on the power system increases, and are more likely the result of a common mode failure impacting multiple generation or transmission facilities (e.g., extreme and prolonged cold weather event lead to freezing generator components, transmission line icing, fuel delivery disruption, etc.) ...
- (N)atural gas generation is fueled using just-in-time transportation and delivery, and therefore, is subject to interruption. Roughly 50 percent of natural gas generation resources are considered interruptible, and in constrained natural gas markets these units are not expected to be served during peak pipeline conditions.²

¹ ICF, Inc., Webinar on Proposed FERC NOPR, October 4, 2017, slide 27.

² National Electric Reliability Council, Synopsis of NERC Reliability Assessments - The Changing Resource Mix and the Impacts of Conventional Generation Retirements (May 2017).

We recognize that the proposed rule is on an aggressive timeline, and that many complex design and implementation issues must be resolved during the Commission's deliberations. We encourage the Commission to exercise all due diligence in completing its review and issuance of a final rule in a timely manner.

Thank you for your consideration of our views.

Sincerely,

Jomes Hunter

James Hunter President, UJEP

Attachment

cc:

Honorable Rick Perry Honorable Neil Chatterjee Honorable Cheryl A. LaFleur Honorable Robert F. Powelson

Unions for Jobs & Environmental Progress

P.O. Box 1446 Olney, MD 20830 ujep4jobs@gmail.com www.ujep4jobs.org

Jim Hunter, IBEW (Ret.) President, UJEP <u>jim@jimhunterllc.com</u> John Risch, SMART-TD Vice President, UJEP <u>jrisch@smart-union.org</u>

The Honorable Rick Perry Secretary U.S. Department of Energy 1000 Independence Avenue Washington, DC 20585-1000 May 25, 2017

Via E-Mail Transmission

Re:

Baseload Reliability Study

Dear Secretary Perry:

I am writing on behalf of the organizations affiliated with Unions for Jobs & Environmental Progress (UJEP). UJEP affiliates represent some 3.2 million workers from the electric utility, mining, rail, and construction sectors. Our affiliates' members are significantly affected by the ongoing transformation of the electric power sector, and the increasing dependence on renewables and natural gas generation. These workers have lost tens of thousands of jobs as a consequence of the recent closures of mines and coal generating plants due to a number of variables, most importantly a glut of natural gas and lower natural gas prices, compounded by the high compliance costs of U.S. EPA regulations on mercury emissions.

UJEP is an ad hoc association of labor unions involved in energy production and use, transportation, engineering, and construction. Our members are: International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Union; International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers; International Brotherhood of Electrical Workers; International Brotherhood of Teamsters; SMART Transportation Division; Transportation • Communications International Union, IAM; United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada; United Mine Workers of America, and Utility Workers Union of America. For more information about us, visit www.ujep4jobs.org.

We strongly support DOE's plan for a critical examination of electricity markets, which includes reviewing the value of baseload power, and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants directly employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient and dependable electric grid.

Baseload power plants have long been the dependable work horses of the electric system, providing energy and ancillary services to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all adverse circumstances. Unlike other energy resources, their operation is not subject to interruption by factors such as extreme weather events or attacks on infrastructure. Our national security, and the economic base of communities across the nation, is dependent on maintaining these plants to support a resilient supply of affordable electricity.

Extreme weather events such as the 2014 polar vortex resulted in a significant amount of gas-fired generation being unavailable due to curtailments of gas supplies and gas infrastructure challenges, threatening the reliability of the grid. Many studies point to increasing frequency of extreme weather events for decades to come that could pose significant risks to the grid.

Numerous baseload power plants have shut down in recent years, and more are expected to close prematurely in the near future. According to EIA, some 40,000 megawatts of coal generation capacity has been shuttered due to the high cost of compliance with EPA's 2012 mercury rule alone. Once these plants are retired, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates for non-baseload renewable generation, regulations that target these resources, low natural gas prices, and markets that do not value resiliency and dependability. Further plant closures would contribute to market volatility, result in significant job loss, and discourage industrial development opportunities nationwide. A manufacturing base, and the jobs that go with it, cannot be attracted to return to areas lacking affordable, reliable sources of baseload power.

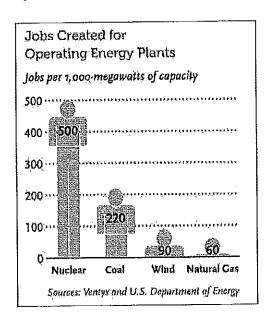
Jobs by Energy Source

Our coal and nuclear baseload power plants – and the dedicated, skilled workers who operate, maintain, and supply them – are the lifeblood of their communities. They

DOE/EIA, Annual Energy Outlook Early Release: Analysis of Two Cases (May 2016) at 27.

¹ NERC Polar Vortex Review, (September 2014) http://www.nerc.com/pa/rrm/January%202014%20Polar%20Vortex%20Review/Polar_Vortex_Review_29 __Sept_2014_Final.pdf

provide a strong tax base for essential public services and support more high-paying jobs than other forms of electricity generation (see chart below.) Workers depend on these plants as a basic source of their livelihoods, and their communities, and the country depends on them to support a healthy economy and electricity supply. These workers have been a critical part of this nation's economic backbone.



The reason for the job disparity among generation sources is the complexity and labor intensity of nuclear and coal generating plants, including their operation, maintenance, and fuel supply cycles. Renewable energy supplies are capital intensive, but not labor intensive. The coal and nuclear generation sectors, including their fuel and transportation supply chains, provide the type of high-skill, family-supporting jobs necessary to anchor the economy of the local communities associated with this energy infrastructure.

We recognize that renewable energy creates some jobs. Unfortunately, most of these jobs are only in construction, with much smaller numbers in operation and maintenance. In addition, the overwhelming majority of these jobs do not provide wages and benefits sufficient for building economically healthy middle-class communities. The bulk of solar panel manufacturing is done in China and other developing nations. Rooftop solar installation is done domestically, but is not a source of high-paying, middle-class jobs. Simply because a job is in the renewable sector and considered by many a "green job" does not make it a good paying, family-supporting job.

Ohio Case Study

One example of the economic anchoring effect of baseload power can be found in Adams County, Ohio. Dayton Power & Light (DP&L) has announced its intention to close two coal-fired plants: The J.M. Stuart Station (2,400 MW) and Killen Station (600 MW) together employ upwards of 700 people during normal operations, and in excess of 1,000 during outage events, with an annual payroll of \$80 million. For Adams County, these plant closures would mean the loss of \$8.5 million in tax revenue - equivalent to half of the county's general fund revenue. Schools, hospitals, first responder services, local government, all would be forced to severely curtail services, or even close entirely.

In effect, the entire middle-class economy of Adams County depends on the family-supporting jobs in these stations, and all of the directly associated economic activity including transmission, maintenance, parts and equipment, fuel supply, and fuel transportation. The U.S. Department of Commerce estimates that each job in the Ohio electric generation sector creates 3.54 total direct and indirect jobs. Despite having spent \$800 million on emissions equipment in 2006, bringing the stations into full EPA compliance, DP&L is now planning to close the plants and walk away from the local economy, triggering a cascade of economic devastation.

NERC Study Supports Critical Need for Baseload Power

The recent NERC reliability study⁴ submitted to you on May 9th raises numerous cautions about the risks of increased dependence on intermittent generation resources, as well as on natural gas. Current market prices for gas could rise in the future, raising electricity rates absent affordable baseload generation remaining online. Price volatility for natural gas is well documented. We fully concur with NERC's observations about the need for greater attention to the critical role played by conventional coal and nuclear baseload generation:

The rapid changes occurring in the generation resource mix and technologies are altering the operational characteristics of the grid and will challenge system planners and operators to maintain reliability. More specifically:

• Impact of Premature Retirements: Conventional units, such as coal plants, provide frequency support services as a function of their large spinning generators and governor-control settings along with reactive support for voltage control. Power system operators use these services to plan and operate reliably under a variety of system conditions, generally without the

³ U.S. Dept. of Commerce, Bureau of Economic Analysis, RIMS II Direct Effect Jobs Multipliers, Table 3.5 (2014).

National Electric Reliability Council, Synopsis of NERC Reliability Assessments - The Changing Resource Mix and the Impacts of Conventional Generation Retirements (May 2017).

concern of having too few of these services available. Coal-fired and nuclear generation have the added benefits of high availability rates, low forced outages, and secured on-site fuel. Many months of on-site fuel allow these units to operate in a manner independent of supply chain disruptions.

• Replacement Resource Capability and Characteristics: As the generation resource mix evolves, the reliability of the electric grid depends on the operating characteristics of the replacement resources. Natural gas-fired units, variable generation, storage, and other resources can provide similar reliability services. However, as a practical matter, costs, market rules, or regulatory requirements (or lack thereof) can affect whether these resources are equipped and available to provide reliability services. To ensure reliability, new generator and load resources must maintain the balance between load and generation, especially during ramping periods. In addition, in some jurisdictions, substantial amounts of generation are now being added "behind the meter" (e.g., roof top solar) and these resources are invisible to system operators. ...

Fuel diversity provides a fundamental benefit of increased resilience. Without this diversity, the impact of rare events impacting availability of resources on the power system increases and are more likely the result of a commonmode failure impacting multiple generation or transmission facilities (e.g., extreme and prolonged cold weather event leads to freezing generator components, transmission line icing, fuel delivery disruption, etc.). Areas with limited fuel and/or limited resource diversity may be challenged and should increase their attention to resiliency planning, which requires a strong partnership with state regulators. With natural gas generation primed to continue its growth as the leading choice for new and replacement capacity, important distinctions around fuel security need to be incorporated into reliance and long-term planning at states and with market operators. Mainly, natural gas generation is fueled using just-intime transportation and delivery, and therefore, is subject to interruption. Roughly 50 percent of natural gas generation resources are considered interruptible, and in constrained natural gas markets these units are not expected to be served during peak pipeline conditions. Many of these plants no longer have the option of burning a liquid fuel. Further, regardless of fuel service arrangements, natural gas generation is subject to curtailment during a force majeure event. (Emphasis in original.)

Unless corrective actions are taken, including new mechanisms that recognize baseload attributes and ensure appropriate compensation for providing the resilience and dependability benefits of baseload coal and nuclear capacity in the electricity marketplace, the long-term viability of these baseload power plants along with the jobs and community economic benefits they bring is in peril.

We encourage the Administration to take prompt and meaningful action to protect baseload coal and nuclear power plants and ensure fuel diversity as the cornerstone of our ability to supply affordable and reliable power to American industry and consumers. Such action is critical to grow our economy and create jobs for the American worker.

Sincerely,

James Hunter

President, UJEP

cc: Brian McCormack



April 20, 2018

The Honorable James Richard Perry Secretary of Energy United States Department of Energy 1000 Independence Avenue, S.W. Washington, DC 20585

> Re: FirstEnergy Solutions' Request for Emergency Relief under Section 202(c) of the Federal Power Act

Secretary Perry:

Advanced Energy Economy ("AEE") provides the following comments in response to FirstEnergy Solution's ("FE") March 29, 2018 request that the Department of Energy ("DOE") take "emergency" action under Federal Power Act ("FPA") Section 202(c) to direct that certain existing coal and nuclear generators in the PJM Interconnection, L.L.C. ("PJM") region receive extraordinary support, in the form of guaranteed out-of-market compensation.¹

For the reasons discussed below, AEE, on behalf of itself and its members, respectfully urges the Secretary to swiftly reject FE's request. There is no legal basis on which to grant FE's request. Using FPA Section 202(c) in the sweeping manner proposed by FE would be inconsistent with the plain language of the statute, DOE's own regulations, and DOE's prior usage of the statute. Moreover, there is no reliability or resilience emergency in PJM that would justify such unprecedented action, which would upend the operation of the wholesale markets and interfere with established processes for assessing and addressing reliability and resilience concerns.

Interests of AEE

AEE is a national organization of businesses making the energy we use secure, clean, and, affordable. AEE and its state and regional partner organizations, which are active in 27 states across the country, represent more than 100 companies and organizations that span the advanced energy industry and its value chains. Technologies represented include energy efficiency, demand response, natural gas, solar photovoltaics, solar thermal electric, ground-source heat pumps, wind, storage, biofuels, electric vehicles, advanced metering infrastructure, transmission and distribution efficiency, fuel cells, hydro power, nuclear power, combined heat and power, and enabling software. Used together, these technologies and services will create and maintain a higher-performing energy system—one that is reliable and resilient, diverse, cost-effective, and clean—while also improving the availability and quality of customer-facing services. AEE promotes the interests of its members by engaging in policy advocacy at the federal,

¹ AEE reserves the right to supplement these comments and exercise any other rights provided to participants in proceedings under the FPA should DOE open a formal proceeding or otherwise take action on FE's request.

state, and regulatory levels, by convening groups of CEOs to identify and address cross-industry issues, and by conducting targeted outreach to key stakeholder groups and policymakers.

Many of AEE's members either participate directly as competitors in the wholesale electricity markets, including the markets operated by PJM Interconnection, L.L.C. ("PJM"), or are significantly impacted by the outcomes in those markets. AEE is concerned about the impacts that granting FE's request for extraordinary out-of-market cost support would have on the PJM markets and the ability of all energy technologies to compete on a level playing field in those markets. In addition, AEE is troubled by the significant cost increases to ratepayers (including many of AEE's members) that would result from granting FE's request.

Motion to Intervene

AEE does not believe that FE's March 29, 2018 request has become a "proceeding" in which it must intervene and be granted party status to preserve its rights to fully participate under the FPA. However, out of an abundance of caution, AEE respectfully requests leave to intervene and be granted party status with respect to FE's request. Based on the foregoing statement, AEE submits that it has a significant interest in DOE's resolution of FE's request that cannot be adequately represented by any other party.

• FE's Requested Use of Section 202(c) Would Be Unlawful, Because There Is No Imminent Reliability or Resilience Emergency Requiring Immediate Action

The statutory text of Section 202(c), DOE's regulations implementing that text, and relevant judicial precedent all require rejection of FE's request. These authorities all emphasize that the authority granted to DOE by Congress to intervene in the electricity markets to *order* generation resources to produce electric energy – that is, to compel them to operate – is limited to rare instances where an emergency threatens national security or the imminent loss of electricity supply. For example, Section 202(c) itself defines "emergency" narrowly, stating that DOE may exercise its authority to compel production of electricity only in times of "war" or during "sudden" increases in demand or shortages of electricity supply.³ As the D.C. Circuit has explained, this statutory language "speaks of 'temporary' emergencies, epitomized by wartime disturbances, and is aimed at situations in which demand for electricity exceeds supply." ⁴ DOE's regulations implementing Section 202(c) similarly define "Emergency" to mean "unexpected . . . events [that] may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected 'entity' to prevent." ⁵

5 10 C.F.R. § 205.371.

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² For example, DOE has not provided public notice of FE's request, opened notice and comment procedures, or taken any other action on the request. DOE has also stated that its creation of an e-mail repository for comments and materials related to Section 202(c) does not "establish a "docket," and those submitting correspondence do not constitute parties or intervenors to any proceeding." See https://www.energy.gov/oe/services/electricity-policy-coordination-and-implementation/other-regulatory-efforts/does-use.

 ³ 16 U.S.C. § 824(c)(1).
 ⁴ Richmond Power & Light v. FERC, 574 F.2d 610, 615 (D.C. Cir. 1978).

There is no emergency in the PJM region that supports taking action under Section 202(c). As PJM and others have demonstrated many times, and as the Federal Energy Regulatory Commission ("FERC") concluded earlier this year, there are simply no imminent threats to reliability or resilience, nor any sudden increases in demand or decreases in electricity supply anticipated in the PJM region.⁶ The PJM region has more than adequate supply, clearing a 23.9 percent reserve margin in its most recent capacity auction.⁷ DOE's 2017 "Staff Report to the Secretary on Electricity Markets and Reliability", in fact, found that the bulk power system is operating reliably and is expected to continue to do so even as the composition of the generation fleet changes.⁸

There is also no severe weather condition, act of God, or unforeseen event impacting the region or FE itself. FE's request points only to past weather events, all of which were managed effectively with no resulting reliability or resilience emergency. FE points to a single flawed study claiming that the PJM region would have suffered "interconnect-wide blackouts" if certain coal generation resources had not been available during the recent "Bomb Cyclone" cold weather event. But as PJM and industry analysts have noted, that study fails to recognize that under PJM's economic dispatch model "PJM dispatched coal units because their costs were lower during certain hours of the cold snap," not because they provided greater resilience than other availability resources. PJM has also provided significant data and analysis to refute the claim that blackouts would have occurred without those coal resources.

FE bases its request primarily on the claim that its coal and nuclear generating assets are not being compensated sufficiently, which is an economic issue. DOE's regulations, however, state that "economic factors . . . generally will not be considered as emergencies unless the inability to supply electric service is imminent." Moreover, the United States Court of Appeals for the District of Columbia Circuit has explained that Section 202(c) is "aimed at situations in which demand for electricity exceeds supply and not at those in which supply is adequate but a means of fueling its production is in disfavor." FE's request seeks to address financial woes caused by low natural gas prices and the emergence of cost-effective advanced energy technologies that has made its preferred fuel sources less competitive in the wholesale markets. But as Bruce Walker, Assistant Secretary for the Office of Electricity Delivery and

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⁶ See, e.g., Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule, Docket No. RM18-1-000 (October 23, 2017); Grid Reliability & Resilience Pricing, 162 FERC ¶61,012 (2018).

⁷ https://www.pjm.com/~/media/markets-ops/rpm/rpm-auction-info/2020-2021-base-residual-auction-report.ashx 8https://www.energy.gov/sites/prod/files/2017/08/f36/Staff%20Report%20on%20Electricity%20Markets%20and%20Reliability 0.pdf.

⁹ See FirstEnergy Application Request, available at: https://www.rtoinsider.com/wp-content/uploads/fes-202c-application.pdf

¹⁰ "Reliability, Resilience and the Oncoming Wave of Retiring Baseload Units, Volume I: The Critical Role of Thermal Units During Extreme Weather Events," National Energy Technology Laboratory (March 27, 2018).

^{11 &}quot;Perspective and Response of PJM Interconnection to

National Energy Technology Laboratories Report Issued March 13, 2018," PJM Interconnection LLC (April 13, 2018).

^{13 10} C.F.R. § 205.371.

¹⁴ Richmond Power & Light, 574 F.2d at 615.

Energy Reliability correctly observed, Section 202(c) is "not designed" to "stave [off] an economic issue." ¹⁵

FE has also not identified an "imminent" problem. The retirements projected by FE, if they occur, will happen over the course of several months or even years. For example, several of the generators targeted for special treatment in the FE request have capacity supply obligations in PJM extending at least a year into the future. In addition, PJM has specific processes in place to address the potential reliability impacts from plant closures. Retiring generators must provide notice to PJM, which then studies the potential reliability impacts that could occur. If reliability concerns are identified, PJM can offer full cost of service compensation under a "Reliability Must Run" contract to keep those plants online until solutions to the identified reliability issues can be planned and implemented. ¹⁶ This process protects the PJM from most "imminent" reliability threats. Granting FE's request would inappropriately bypass this established process.

Indeed, in its request FE appears to concede it is asking for assistance that Section 202(c) simply does not contemplate. For example, FE notes that DOE's implementing regulations do not address the "emergency" that FE has identified, ¹⁷ and states that it cannot provide much of the information required by those regulations. ¹⁸

• Granting FE's Request Would be Inconsistent with DOE's Prior Use of Section 202(c)

Granting FE's request here would be a significant departure from DOE's past practice. DOE has used its Section 202(c) authority only eight times since 2000. For example, DOE deployed the emergency measure following Hurricane Katrina and Hurricane Ike to ensure that essential services were restored after the devastating storms. Last year, DOE issued two Section 202(c) orders, in both cases to ensure that specific plants were available to meet short-term reliability needs. In one case, continued operation of a single plant was required on a temporary to provide reactive power after severe weather damaged to other plants in the areas, resulting in a short term shortage of reactive power support in the region. ¹⁹ In the other, units in PJM were required to run on a short-term basis (approximately six months) to provide specific reliability services needed by PJM until transmission reinforcements could be completed. ²⁰

In contrast, FE's request here would compel the operation of a loosely defined set of coal and nuclear plants on a long-term basis (four years) to address ill-defined threats to "fuel security and diversity," "energy security and reliability," and "grid dependability and resiliency." FE's request fails to identify any specific generating units that are needed for reliability, or the specific reliability issues that

²⁰ Federal Power Act Section 202(c) - PJM Interconnection & Dominion Energy Virginia, 2017



¹⁵ See, e.g., https://www.politico.com/newsletters/morning-energy/2018/03/30/all-eyes-on-perry-after-firstenergy-move-154378.

¹⁶ http://www.cleveland.com/business/index.ssf/2018/03/power grid manager pjm to doe.html. http://www.pjm.com/planning/services-requests/gen-deactivations.aspx.

¹⁷ See FE Application at 27, n. 169.

¹⁸ Id. at 27-31.

¹⁹ Federal Power Act Section 202(c) - Grand River Dam Authority, April 2017

would result from their imminent closure, as applicants have in all prior cases where DOE has utilized its Section 202(c) authority. For these reasons, DOE should decline to use that authority here.

 Granting FE's Request Would Threaten to Unravel the Competitive Wholesale Markets that Congress and FERC Have Sought to Foster, And Would Undermine Energy Technology Innovation in Those Markets

For decades, it has been the policy of Congress and FERC to utilize market-based mechanisms to increase competition in the wholesale power markets and ensure just and reasonable rates as the FPA requires. FERC has, with the approval of Congress, fostered the development of Regional Transmission Organizations and Independent System Operators ("RTOs/ISOs") like PJM, which independently administer markets for wholesale energy and other wholesale electricity products across the country. While these markets are by no means perfect, they have been successful in ensuring reliability and just and reasonable rates while encouraging significant energy technology innovation. The Brattle Group found that PJM's markets have created a more efficient and reliable grid, despite widespread retirements of coal plants. Brattle stated that PJM, despite these retirements, passed that so-called "stress test . . . with no evident threat to reliability.²¹

Competitive markets have allowed for numerous technologies to enhance the reliability and resilience of the grid particularly during times of stress. PJM credited wind and demand response with helping to maintain reliability during the 2014 Polar Vortex, and after the devastating Hurricane Irma in 2017, utilities called upon DR to help maintain grid stability.^{22,23}

Markets also embrace the innovation of advanced energy technologies, which have significant operational and reliability benefits to offer the grid that may be superior to traditional thermal generation, such as the resources in question in FE's request. For example, some advanced energy technologies, such battery storage, are "instant on," and because of their distributed nature, can immediately provide support to specified areas of the grid in a reliability emergency.

Market-based mechanisms necessarily create winners and losers, which means retirement for inefficient resources. FE's request would interfere with the operation of those mechanisms by providing certain technologies with preferential, cost-based compensation determined outside of those markets. The presence of so many resources with cost-based rates would distort market outcomes and discriminate against other technologies in the marketplace, putting them at a competitive disadvantage, while increasing costs to consumers and denying them the cost-reduction and technology-innovation benefits of robust competition among a variety of suppliers. Propping up resources that can no longer economically

²³ https://energysmart.enernoc.com/following-hurricane-irma-demand-response-stepped-amid-efforts-restore-power



²¹ Letter to U.S. Government Accountability Office in response to U.S. Senators' Capacity Market Questions, Brattle Group (May 5, 2017).

²² Petition for Rehearing En Banc Of PJM Interconnection, L.L.C., Electric Power Supply Ass'n v. FERC at 10-11, No. 11-1486 (D.C. Cir. July 7, 2014)

compete ultimately harms ratepayers and directly undermines FERC's ability to meet its statutory obligation to ensure just and reasonable rates.

As DOE knows, FERC recently opened a new proceeding to examine long-term resilience in the RTO/ISO markets.²⁴ In the absence of any credible demonstration of an immediate threat to reliability or resilience, FERC should be allowed to continue its exploration of long-term resilience and develop a record that will allow it to find approaches to addressing resilience problems that continue to rely on technology-neutral market-based mechanisms.

Conclusion

For the foregoing reasons, AEE respectfully requests that DOE reject FE's request for action under FPA Section 202(c). Thank you for your attention to these comments.

Please feel free to reach out to either Malcolm Woolf, SVP of Policy (<u>mwoolf@aee.net</u>, 202-391-0678) or Maria Robinson, Director of Wholesale Markets (<u>mrobinson@aee.net</u>, (b) (6)) with any follow-up questions or comments.

 $^{^{24}}$ See Grid Reliability & Resilience Pricing, 162 FERC \P 61,012 (2018).



Document 111

From:

Cone, Travis (Capito)

To: Subject: AskOE

Date:

202(c) petition Friday, April 20, 2018 2:35:00 PM

Attachments:

image001.png image002.png image003.png image004.png image005.png

May 2017 Capito Statement.pdf

10062017 FERC Commissioners on DoE Grid Reliability Baseload Power NOPR SIGNED.pdf

To whom it may concern,

I am writing on behalf of Senator Capito to express her support for the Department of Energy taking measures to ensure grid resilience and reliability by protecting baseload coal and nuclear assets from distortionary market forces.

I have attached a letter led by the Senator and signed by the West Virginia House delegation to then-FERC Chairman Chatterjee in support of the Secretary's NOPR on the issue and a press release on the same subject.

The Senator has also communicated support for the targeted use of Federal Power Act Section 202c authority in this arena via letter to and conversation with President Trump.

Thanks for your consideration.

Sincerely,

Travis Cone

C. Travis Cone

Legislative Assistant
Senator Shelley Moore Capito (R-WV)
172 Russell Senate Office Building (SR-172)
Washington, DC 20515
202-224-6472

travis_cone@capito.senate.gov











CAPITO ENCOURAGED BY ENERGY SECRETARY'S ELECTRIC GRID STUDY

WASHINGTON, D.C. — U.S. Senator Shelley Moore Capito (R-W.Va.) today applauded U.S. Department of Energy Secretary Rick Perry's decision to initiate a study of the nation's electric grid, specifically examining the impact regulatory burdens have had on base load power sources, as well as the importance of fuel diversity in ensuring grid reliability. The study was initiated Friday and will continue over a two-month period.

"I am encouraged by Secretary Perry's decision to study the reliability of our energy grid," said Senator Capito. "If we are going to have affordable, reliable energy that powers our economy and advances our quality of life, we must maintain an adequate supply of base load electricity that is always available when it is needed. There is a role for multiple energy sources, including our own West Virginia coal and natural gas, as well as nuclear and renewables. But there is a clear difference between intermittent energy sources and base load power. A diversity in fuel sources and technologies is essential for a reliable and properly functioning electric grid. I am glad that the Department of Energy, under the new administration, recognizes that our coal, natural gas, and nuclear plants are vital assets in ensuring that affordable energy is always available to meet the needs of the American people."

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Congress of the United States Washington, DC 20515

October 6, 2017

Chairman Neil Chatterjee Commissioner Cheryl A. LaFleur Commissioner Robert F. Powelson Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

RE: Docket No. RM18-1-000, Grid Reliability and Resilience Pricing

Dear Chairman Chatterjee, Commissioner LaFleur, and Commissioner Powelson,

As members of the congressional delegation representing the state of West Virginia, we write you expressing our support for the Secretary of Energy's direction to the Federal Energy Regulatory Commission to issue grid resiliency pricing rules recognizing the value of fuel-secure baseload resources in the organized power markets within the jurisdiction of the Commission. We encourage the Commission to expeditiously and affirmatively direct the regional transmission organizations (RTOs) and independent operators (ISOs) to recognize the value of these fuel-secure electric generation sources to the grid's reliability and fuel security through cost-recovery for eligible units by utilizing the authorities granted to it by Congress in Sections 205 and 206 of the Federal Power Act.

West Virginia is an interstate energy exporter, sending more than half of its net electricity production across state lines through the PJM Interconnection, the nation's largest RTO. According to the Energy Information Administration (EIA), this makes West Virginia one of the top five states in net interstate sales of electricity. Additionally, the EIA finds that West Virginia is the second largest coal producer in the country, with three-quarters of that production going to other states. As a result the state has a key role to play in our nation's energy infrastructure, generating fuel-secure baseload power for itself and its neighbors and providing additional fuel for other states' baseload electric generation generators.

We believe this integration of West Virginia into the national electric grid is a strength for both the state and the nation. However, in recent years historically high production and resulting low prices of natural gas, significant regulatory burdens, and market-distorting preferential subsidies and mandates for renewable sources have led to coal-fired power being unable to compete in regional electric markets. The nuclear industry is facing similar challenges. The result has been the closure and proposed closure of hundreds of coal and several nuclear generating units; as the Department of Energy noted in its Notice of Proposed Rulemaking

¹ EIA, "West Virginia State Profile and Energy Estimates." July 20, 2017. Accessed September 29, 2017. https://www.eia.gov/state/analysis.php?sid=WV

(NOPR), some 63.7 gigawatts (GW) of coal and nuclear generation capacity was retired between 2002 and 2016, with another 25 GW slated for retirement in coming years.

The retirement of these units poses challenges to the grid's reliability and resilience, has implications for national security, and will put pricing challenges on consumers if market fundamentals shift. The current price advantages of natural gas and subsidized renewable energy in the electric markets are the result of volatile market forces and impermanent federal policies. While these fuel sources have important roles for providing fuel diversity and competitively priced intermittent and interruptible electricity, they do not provide the fuel-secure baseload electricity upon which American citizens and our economy depend.

As their name implies baseload resources can operate at nearly 100 percent capacity at all times, providing a consistent floor of supply in the marketplace and reducing volatility. Coal and nuclear plants also have months of on-site fuel resources, making them resilient to conventional and cyberattacks on pipeline infrastructure and giving them a greater deal of certainty in wholesale electricity prices.

Recent events, such as the 2014 Polar Vortex, demonstrate the risk to the resiliency of RTOs like PJM due to a loss of fuel-secure generation capacity and the lack of availability of variable generation resources. During the Polar Vortex, a potentially catastrophic blackout during a record and persistent cold weather event was only avoided because coal units then scheduled for retirement remained available to be brought back online to meet demand. If present trends continue those resources will not be available during a future capacity crunch. Those units have since retired.

These advantages of fuel-secure electric generation sources must not be taken for granted; yet the organized power markets are doing just that. Short-term marginal fuel price, regulatory overburden, subsidy, and policy mandate advantages for intermittent sources have rendered many baseload units uneconomical. Recognizing the threats posed by the loss of these key baseload resources, state governments such as Illinois and New York have implemented policies to prevent additional closures of coal and nuclear units. However, the interstate nature of the electric markets requires federal action. During the capacity auction process, the organized electric markets must acknowledge the importance of a reliable and resilient electric grid by compensating baseload resources for providing these functions.

The Commission is the federal agency best-suited to addressing these challenges. As you know, the Commission has studied the threats the loss of baseload generation capacity poses to the grid since 2013. FERC's unique authorities under Sections 205 and 206 of the Federal Power Act enable the Commission to address the market's undervaluation of baseload electricity by authorizing cost recovery for eligible fuel-secure baseload generation units within organized electric markets under the Commission's oversight.

We support the Secretary's NOPR and encourage the Commission to take an affirmative final action to protect the reliability and resiliency of the nation's electric grid. Doing so is imperative for protecting the economy and security of West Virginia and the rest of the United

States and following through on congressional intent to maintain an all-of-the-above national energy policy.

Thank you for your timely consideration of this request.

Sincerely,

Shelley Moore Capito

United States Senator

Evan Jenkins Member of Congress David B. McKinley, P.E. Member of Congress

Alex Mooney Member of Congress

CC: The Honorable Rick Perry; Secretary, Department of Energy



April 18, 2018

President Donald J. Trump The White House 1600 Pennsylvania Avenue, NW Washington, DC 20500

RE: Request for Emergency Order By FirstEnergy Solutions Corp. Under Federal Power Act Section 202(c)

Dear Mr. President:

On behalf of DuPont, I am pleased to offer the following comments opposing FirstEnergy Solutions (FES) Corp.'s Request to the Department of Energy (DOE) for issuance of an Emergency Order under Section 202(c) of the Federal Power Act.

DuPont has numerous facilities in the PJM region that employs approximately 15,000 individuals, providing significant economic benefits to these states and the nation. As you know, higher energy and regulatory costs threaten the competitiveness of American job creators, industries, manufacturers, producers, and large industrial users. Higher energy prices also create an economic burden on our employees, and all consumers, in this region.

Section 202(c) of the Federal Power Act is confined to a limited scope of emergencies and imminent events. Section 202(c) solutions are temporary, targeted, and narrowly tailored and it is a power that has only previously been used during national emergencies and wartime. FES is inappropriately using Section 202(c) for internal economic reasons to bail out its failing assets.

The scope of the requested Emergency Order is unprecedented, overbroad, and conflicts with existing statutory and regulatory authority. The request is inconsistent with DOE's prior emergency orders. The request improperly asks DOE to take action that is reserved for the Federal Energy Regulatory Commission's (FERC) ratemaking authority. The request seeks relief that does not constitute "just and reasonable" compensation under the Federal Power Act.

FES's Request also ignores decades of FERC precedent by requesting that PJM customers be forced to pay cost-based, non-market rates for power from FES's uneconomic nuclear and coal facilities. FES requests a return based on the full value of its assets, even when shareholders have already benefitted from writing down those same assets.

Granting the Request would be a government attempt to pick winners and losers undermining the competitive forces at play in wholesale electricity markets.

There is no looming emergency in the PJM region which requires a federal response. Very healthy electricity capacity reserves are available throughout the region targeted by the Request. Mechanisms and standards are in place to ensure reliable delivery of electricity. Energy prices are currently reflecting lower prices for natural gas and other electric generation fuels. An emergency order from the Department of Energy would be unnecessary, an overstep of authority and unlawful.

On behalf of Dupont, and our thousands of employees who will be affected by it, I strongly recommend that the Request be denied.

Sincerely,

Matthew C. Koenings

Vice-President — Corporate Operations

Matthew Koenings

Cc: The Honorable James Richard Perry, Secretary, Department of Energy
The Honorable Lawrence Kudlow, Assistant to the President for Economic Policy & NEC

Director

974 Centre Road Wilminton, DE 19805

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The Honorable James Richard Perry U.S. Department of Energy 1000 Independence Ave., SW Washington, DC 20585.

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Document 113

From:

Harbin, Christine

To:

AskOE; Jereza, Catherine; Lotto, Adrienne; Walker, Bruce

Subject: Date: FW: RGGI impact on PJM prices Tuesday, April 24, 2018 5:06:03 PM

Attachments:

Petition to DOE for study on the Impact of RGGI on PJM Wholesale Prices.docx

RGGI Reduces Efficiency at Power Plants and Raises Emissions.docx

scr cost manual spreadsheet 2016 vf.xlsm

FYI from the Caesar Rodney Institute Center for Energy Competitiveness

From: David Stevenson [mailto:davidstevenson1948@gmail.com]

Sent: Tuesday, April 24, 2018 4:15 PM

To: Harbin, Christine

Subject: RGGI impact on PJM prices

Chrissy,

Please see the attached petition to study the impacts of RGGI on PJM wholesale electric rates, and

two associated documents. Thank you in advance for your help.

David T. Stevenson

Director, Center for Energy Competitiveness

Caesar Rodney Institute

Cell Phone (b) (6)

Sent from Mail for Windows 10



Caesar Rodney Institute Center for Energy Competitiveness PO Box 7619 Wilmington, DE 19803 WWW.CaesarRodney.org

4/24/2018

Christine Harbin Senior Advisor for External Affairs Room 8G-024 U. S. Department of Energy 1000 Independence Ave., SW Washington, DC 20585

Dear Chrissy,

In my e-mail of April 11, I shared a report on how the Regional Greenhouse Gas Initiative (RGGI) was reducing operating hours at coal-fired power plants by raising cost to cover carbon dioxide emission allowances, and making the plants less competitive in the PJM Regional Transmission Organization region. The report also showed how fewer operating hours has resulted in 13 percent lower operating efficiency, and I attach the report here again.

The latest RGGI auction is adding about \$4.17/megawatt-hour to coal-fired Electric Generating Units (EGUs) in Delaware and Maryland. In addition, an Environmental Protection Agency spreadsheet calculates the cost to run Selective Catalytic Reduction (SCR) pollution control equipment under various operating conditions (also attached). Since RGGI began, the SCR operation costs may have risen by \$2.45/megawatt-hour, and increased coal usage may have added another \$0.54, for a grand total of \$7.16/megawatt-hour in added costs. This is a significant amount considering the average PJM Delmarva Zone wholesale price in 2017 was \$35/megawatt-hour.

Assuming those higher costs are included in Clearing Price bids for the PJM Locational Marginal Price plan, these higher costs may be raising electricity costs for the entire PJM region as every EGU in the system receives the same Clearing Price, including the eleven non-RGGI states. Electricity pricing reverberates through our economy impacting U. S. competitiveness, jobs, and especially the poorest among us. Other PJM states are considering entering RGGI, so the cost impact may rise.

PJM keeps records of the winning EGUs in the LMP auction, but the published results are coded to protect confidential information. I am petitioning the DOE to work with PJM to answer the following questions:

- 1) On a monthly, and annual average, what percentage of the time are fossil fuel EGUs in Delaware and Maryland setting the Clearing Price for each hour of the day for the period 2015 through 2017?
- 2) If possible, compare this information for the three main fossil fuels; coal, petroleum liquids, and natural gas powered EGUs?
- 3) What impact are Delaware and Maryland EGU Clearing Price bids having on the annual average LMP?

Please direct this request to the appropriate individuals at DOE, and thank you so much for your assistance.

David T. Stevenson

Director, Center for Energy Competitiveness

Caesar Rodney Institute

e-mail: DavidStevenson@CaesarRodney.org

Phone: (b) (6)



Inside Energy

Published by the Caesar Rodney Institute Center for Energy Competitiveness

RE: Carbon dioxide cap and trade dramatically lower power plant efficiency, and increase emissions

DATE: 4/11/2018

David T. Stevenson, Director

Experience with the nine state Regional Greenhouse Gas Initiative (RGGI) has shown it may actually increase emissions at power plants forced to purchase emission allowances by lowering operating efficiency by turning base load power plants into load followers with intermittent operation. I calculate a 13% decline in efficiency from lower operating hours, compared to a potential 6% gain from all energy efficiency strategies in the Clean Power Plan.

Merchant coal-fired Electric Generating Units (EGU) in two RGGI states, Delaware and Maryland, in the PJM Interconnection Regional Transmission Organization were reviewed. Table 1 provides the combined operating information for coal-fired Chalk Point, MD units 1 and 2, Dickerson, MD, units 1, 2, and 3, and Indian River, DE unit 4.

Table 1: Operating Information for six coal-fired EGU's in MD and DE

Year	ммвти	MWh	Tons CO2	Heat Rate	tons CO2/MWh	Operating Hours	Efficiency
					•		36.5%
2009	77,892,841	8,339,131	7,985,161	9341	0.958	40750	30.370
2010	83,006,579	8,492,233	8,721,474	9774	1.027	41701	34.9%
2011	62,291,965	5,759,548	6,390,655	10815	1.110	32428	31.5%
2012	43,386,334	4,108,110	4,401,386	10561	1.071	26261	32.3%
2013	51,535,606	4,745,005	5,280,418	10861	1,113	30877	31.4%
2014	48,906,883	4,480,833	5,141,322	10915	1.147	26898	31.3%
2015	27,507,453	2,394,986	2,621,515	11485	1.095	15534	29.7%
2016	27,930,508	2,335,968	2,816,511	11957	1.206	16466	28.5%

Source: MMBTU, Ton CO2, and operating hours are from RGGI COATS at https://rggi/index.cfm?hc=ISkgICAK, MWh are from US Energy Information Agency Form 923 at https://www.eia.gov/electricity/data/eia923/, other columns calculated

Graph 1 uses information from Table 1, and shows how increasing RGGI emission allowance prices reduce operating hours. Coal-fired generation in non-RGGI states continued at about twice the RGGI state average.

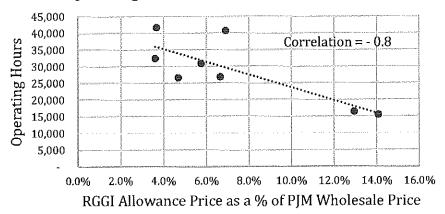


Inside Energy

Published by the Caesar Rodney Institute Center for Energy Competitiveness

Graph 1

DE/MD Merchant Coal-Fired Generating Units Operating Hours vs. RGGI Allowance Cost



Graph 2 also uses information from Table 1, and shows operating efficiency falls approximately 18.5% when operating hours are cut 60%. In the Clean Power Plan estimates of potential energy efficiency improvements totaled about 6%, so the impact of lower operating hours is about three times as large as all other energy efficiency improvements combined! Lower operating efficiency increases CO₂ emissions. The Indian River Power Plant in Delaware saw a 32% rise in emissions per MWh from 2012 when each MWh emitted 0.87 tons of CO₂ to 2017 when each MWh emitted 1.15 tons. More coal was used to produce each MWh.

Lower operating hours over the period has two probable sources; the rapidly falling fuel cost of natural gas compared to coal, and the added cost of carbon dioxide emission allowances. According to the US Energy Information 2017 Agency Annual Energy Outlook, the national average Capacity Factor for coal-fired EGUs, the actual operating hours compared to potential operating hours, for coal-fired EGUs dropped from 65.1% in 2009 to 51% in 2016, or about 1235 hours in reaction to lower natural gas prices. Average operating hours at the six EGU's in Maryland and Delaware fell 4048 hours between 2009 and 2016. So, the ratio of hours lost because of lower natural gas prices to RGGI allowance cost is about 30% to 70%. Therefore, RGGI accounted for about a 13% decline in energy efficiency at the six EGU's (18.5% X 70%). EPA should consider expanding this study beyond six operating units.

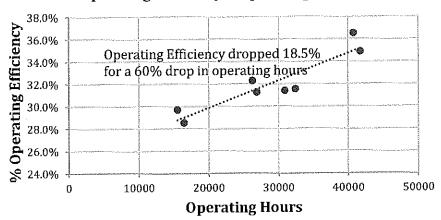


Inside Energy

Published by the Caesar Rodney Institute Center for Energy Competitiveness

Graph 2

Six Merchant Coal Fired Power Plants in MD & DE Operating Efficiency v. Operating Hours



Cost Estimate

Total Capital Investment (TCI)

	TCI for Coal-Fired Bollers
For Coal-Fired Boilers:	
	TCI = 1.3 x (SCR _{cost} + RPC + APHC + BPC)
	C07.70C.440
Capital costs for the SCR (SCR _{cost}) =	\$87,790,115
Reagent Preparation Cost (RPC) =	\$3,955,890
Air Pre-Heater Costs (APHC)* =	\$9,276,189
Balance of Plant Costs (BPC) =	\$7,215,176

Total Capital Investment (TCI) = \$140,71

* This factor applies because the boiler burns bituminous coal and emits equal to or greater than 3lb/MMBtu of sulfur dioxide.

	SCR Capital	Costs (SCR _{cost})
For Coal-Fired Utility Bollers > 25 MW:		
		3 _{MW} x HRF x CoalF) ^{0.92} x ELEVF x RF
For Coal-Fired Industrial Boilers >250 MMI		0.02
	SCR = 270,000 x (NRF) ^{V-2} x	(0.1 x Q _B x CoalF) ^{0.92} x ELEVF x RF

SCR Capital Costs (SCR_{cost}) =

	Rea	gent Preparation Costs (RPC)	
For Coal-Fired Utility Boilers >25 MW: For Coal-Fired Industrial Boilers >250 MMBtu/h	our:	100 x (NOx _{in} x B _{MW} x NPHR x EF 190,000 x (NOx _{in} x Q ₈ x EF) ^{0,25} :	

Reagent Preparation Costs (RPC) =

				Air Pre-Hea	ter Costs (APHC)	* C.	
ог Coal-Fired Utility Во	oilers >25MW:						
			APHC=	= 69.000 x (B,,,,,	x HRF x CoalF)0.7	⁸ x AHF x RF	
	15 4 350 1440						
or Coal-Fired Industria	il Boilers >250 Minib	tu/nour:			0.78		
			APHC	$=69,000 \times (0.1)$	x Q _B x CoalF) ^{0.78}	x AHF x RF	

Air Pre-Heater Costs (APH_{cost}) =

^{*} This factor applies because the boiler burns bituminous coal and emits equal to or greater than 3lb/MMBtu of sulfur dioxide.

		Balance of Plant	Costs (BPC)
			The state of the s
For Coal-Fired Utility Boilers >25MW: For Coal-Fired Industrial Boilers >250 MMB	tu/hour:	= 460,000 x (B _{MW} x HRF C = 460,000 x (0.1 x Q ₈	x CoalF) ^{0.42} x ELEVF x RF x CoalF) ^{0.42} ELEVF x RF

Balance of Plant Costs (BOP_{cost}) =

Annual Costs

Total Annual Cost (TAC) TAC = Direct Annual Costs + Indirect Annual Costs

Direct Annual Costs (DAC) =	\$4,090,330
Indirect Annual Costs (IDAC) =	\$11,350,077
Total annual costs (TAC) = DAC + IDAC	 \$15,440,407

Direct Annual Costs (DAC)

DAC = (Annual Maintenance Cost) + (Annual Reagent Cost) + (Annual Electricity Cost) + (Annual Ca

Annual Maintenance Cost =

0.005 x TCl =

Annual Reagent Cost =

 $q_{sol} x Cost_{reag} x t_{op} =$

Annual Electricity Cost =

 $P \times Cost_{elect} \times t_{op} =$

Annual Catalyst Replacement Cost =

For coal-fired boilers, the following methods may be used to calcuate the catalyst replacement cost.

Method 1 (for all fuel types):

 $n_{scr} x Vol_{cat} x (CC_{replace}/R_{layer}) x FWF$

Method 2 (for coal-fired utility boilers):

 $B_{MW} \times 0.4 \times (CoalF)^{2.9} \times (NRF)^{0.71} \times (CC_{replace}) \times 35.3$

Direct Annual Cost =

Indirect Annual Cost (IDAC)

IDAC = Administrative Charges + Capital Recovery Costs

Administrative Charges (AC) =	0.03 x (Operator Cost + 0.4 x Annual Maintenance Cost) =
Capital Recovery Costs (CR)=	CRF x TCl =
Indirect Annual Cost (IDAC) =	AC + CR =

Cost Effectiveness

Cost Effectiveness = Total Annual Cost/ NOx Removed/year

Total Annual Cost (TAC) =	\$15,440,407 5,553
NOx Removed =	5,553
Cost Effectiveness =	\$2,780

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III 2014 Uollais
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+5/505/650 HTZ01+300HTS
\$9,276,189 in 2014 dollars
\$7,215,176 in 2014 dollars

in 2014 dollars In 2014 dollars In 2014 dollars

talyst Cost)

\$703,582 in 2014 dollars \$2,598,379 in 2014 dollars \$539,055 in 2014 dollars \$249,314 in 2014 dollars

* Calculation Method 1 selected.

\$4,090,330 in 2014 dollars

\$10,250 in 2014 dollars \$11,339,827 in 2014 dollars \$11,350,077 in 2014 dollars

per year in 2014 dollars tons/year

per ton of NOx removed in 2014 dollars

From: To:

Hrkman, Lou

<u>AskQE</u>

Subject: Date:

Submittal

Tuesday, April 24, 2018 10:33:12 AM

Attachments:

image001.png WV Republicans.pdf

May 2017 Capito Statement.pdf
May 2017 Jenkins - WV Rep - Letter to DOE.PDF
May 2017 McKinley - WV Rep - Letter to DOE.PDF

Please include for the record

Lou Hrkman

Policy Adviser

Congressman David B. McKinley, P.E. (WV-01)

2239 Rayburn House Office Building

Washington, DC 20515

(202) 225-4172



Document 114

Congress of the United States Washington, DC 20515

October 6, 2017

Chairman Neil Chatterjee
Commissioner Cheryl A. LaFleur
Commissioner Robert F. Powelson
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE; Docket No. RM18-1-000, Grid Reliability and Resilience Pricing

Dear Chairman Chatterjee, Commissioner LaFleur, and Commissioner Powelson,

As members of the congressional delegation representing the state of West Virginia, we write you expressing our support for the Secretary of Energy's direction to the Federal Energy Regulatory Commission to issue grid resiliency pricing rules recognizing the value of fuel-secure baseload resources in the organized power markets within the jurisdiction of the Commission. We encourage the Commission to expeditiously and affirmatively direct the regional transmission organizations (RTOs) and independent operators (ISOs) to recognize the value of these fuel-secure electric generation sources to the grid's reliability and fuel security through cost-recovery for eligible units by utilizing the authorities granted to it by Congress in Sections 205 and 206 of the Federal Power Act.

West Virginia is an interstate energy exporter, sending more than half of its net electricity production across state lines through the PJM Interconnection, the nation's largest RTO. According to the Energy Information Administration (EIA), this makes West Virginia one of the top five states in net interstate sales of electricity. Additionally, the EIA finds that West Virginia is the second largest coal producer in the country, with three-quarters of that production going to other states. As a result the state has a key role to play in our nation's energy infrastructure, generating fuel-secure baseload power for itself and its neighbors and providing additional fuel for other states' baseload electric generation generators.

We believe this integration of West Virginia into the national electric grid is a strength for both the state and the nation. However, in recent years historically high production and resulting low prices of natural gas, significant regulatory burdens, and market-distorting preferential subsidies and mandates for renewable sources have led to coal-fired power being unable to compete in regional electric markets. The nuclear industry is facing similar challenges. The result has been the closure and proposed closure of hundreds of coal and several nuclear generating units; as the Department of Energy noted in its Notice of Proposed Ruleinaking

¹ EIA, "West Virginia State Profile and Energy Estimates." July 20, 2017. Accessed September 29, 2017. https://www.eia.gov/state/analysis.php?sid=WV

(NOPR), some 63.7 gigawatts (GW) of coal and nuclear generation capacity was retired between 2002 and 2016, with another 25 GW slated for retirement in coming years.

The retirement of these units poses challenges to the grid's reliability and resilience, has implications for national security, and will put pricing challenges on consumers if market fundamentals shift. The current price advantages of natural gas and subsidized renewable energy in the electric markets are the result of volatile market forces and impermanent federal policies. While these fuel sources have important roles for providing fuel diversity and competitively priced intermittent and interruptible electricity, they do not provide the fuel-secure baseload electricity upon which American citizens and our economy depend.

As their name implies baseload resources can operate at nearly 100 percent capacity at all times, providing a consistent floor of supply in the marketplace and reducing volatility. Coal and nuclear plants also have months of on-site fuel resources, making them resilient to conventional and cyberattacks on pipeline infrastructure and giving them a greater deal of certainty in wholesale electricity prices.

Recent events, such as the 2014 Polar Vortex, demonstrate the risk to the resiliency of RTOs like PJM due to a loss of fuel-secure generation capacity and the lack of availability of variable generation resources. During the Polar Vortex, a potentially catastrophic blackout during a record and persistent cold weather event was only avoided because coal units then scheduled for retirement remained available to be brought back online to meet demand. If present trends continue those resources will not be available during a future capacity crunch. Those units have since retired.

These advantages of fuel-secure electric generation sources must not be taken for granted; yet the organized power markets are doing just that. Short-term marginal fuel price, regulatory overburden, subsidy, and policy mandate advantages for intermittent sources have rendered many baseload units uneconomical. Recognizing the threats posed by the loss of these key baseload resources, state governments such as Illinois and New York have implemented policies to prevent additional closures of coal and nuclear units. However, the interstate nature of the electric markets requires federal action. During the capacity auction process, the organized electric markets must acknowledge the importance of a reliable and resilient electric grid by compensating baseload resources for providing these functions.

The Commission is the federal agency best-suited to addressing these challenges. As you know, the Commission has studied the threats the loss of baseload generation capacity poses to the grid since 2013. FERC's unique authorities under Sections 205 and 206 of the Federal Power Act enable the Commission to address the market's undervaluation of baseload electricity by authorizing cost recovery for eligible fuel-secure baseload generation units within organized electric markets under the Commission's oversight.

We support the Secretary's NOPR and encourage the Commission to take an affirmative final action to protect the reliability and resiliency of the nation's electric grid. Doing so is imperative for protecting the economy and security of West Virginia and the rest of the United

States and following through on congressional intent to maintain an all-of-the-above national energy policy.

Thank you for your timely consideration of this request.

Sincerely,

Shelley Moore Capito

Evan Jenkins Member of Congress David B. McKinley, P.E. Member of Congress

Alex Mooney
Member of Congress

CC: The Honorable Rick Perry; Secretary, Department of Energy

CAPITO ENCOURAGED BY ENERGY SECRETARY'S ELECTRIC GRID STUDY

WASHINGTON, D.C. — U.S. Senator Shelley Moore Capito (R-W.Va.) today applauded U.S. Department of Energy Secretary Rick Perry's decision to initiate a study of the nation's electric grid, specifically examining the impact regulatory burdens have had on base load power sources, as well as the importance of fuel diversity in ensuring grid reliability. The study was initiated Friday and will continue over a two-month period.

"I am encouraged by Secretary Perry's decision to study the reliability of our energy grid," said Senator Capito. "If we are going to have affordable, reliable energy that powers our economy and advances our quality of life, we must maintain an adequate supply of base load electricity that is always available when it is needed. There is a role for multiple energy sources, including our own West Virginia coal and natural gas, as well as nuclear and renewables. But there is a clear difference between intermittent energy sources and base load power. A diversity in fuel sources and technologies is essential for a reliable and properly functioning electric grid. I am glad that the Department of Energy, under the new administration, recognizes that our coal, natural gas, and nuclear plants are vital assets in ensuring that affordable energy is always available to meet the needs of the American people."

###

Congress of the United States Washington, DC 20515

May 11, 2017

Dear Secretary Perry:

We commend you on your leadership at the Department of Energy (DOE) to highlight the importance of the nation's electric grid resilience. Your actions thus far have been well received by many of our constituents, and we support your efforts to prioritize the DOE's core missions.

It has come to our attention that you recently initiated a 60-day study exploring the long-term reliability of the electric grid, noting specifically that there is "concern about how certain policies are affecting, and potentially putting at risk, energy security and reliability". This study will be especially timely as Congress takes up comprehensive tax reform, crafts an energy infrastructure package, and considers the fiscal year 2018 budget. The input of the DOE on policy areas such as grid reliability, market incentives, and subsidies for particular types of energy production will be critical as we debate changes to the energy and tax landscape.

There are notable concerns among industry stakeholders that today's energy and electricity markets have been distorted by outdated and unnecessary incentives and subsidies. For example, it was recently noted by the U.S. Energy Information Administration that tax credits have made some types of energy production outlandishly competitive due to their subsidies — in some cases, even below the prevailing market rates of comparable energy sources.

Today's power generation mix provides us with an abundant variety of domestic energy sources. These provide our various states and regions the flexibility to tailor their electricity generation capacity to meet the demands of American businesses and families. Affordable and reliable energy is a key concern for our domestic manufacturers, enabling them to compete and thrive in the global marketplace. In order to optimize the economic efficiency of the electric grid and ensure the wise use of taxpayer dollars, we recommend your study include proposals that review the impact of leveling the disparity in tax credits and subsidies with the comparative costs of energy generation.

Additionally, we urge you to consider the national security implications of incentivizing specific types of energy generation. The vital role that baseload power plants, especially those with fuel readily available onsite, play in grid reliability and resiliency is an essential component of sound energy policy. These plants are the backbone of the nation, and carry our power system through extended emergencies like the Polar Vortex that impacted the United States in late 2013 to early 2014. Unfortunately, these plants are closing at a rapid pace, and many more are at risk of closure in the near future. Whether in response to natural disasters, extreme weather, or national security emergencies, being able to ensure we have adequate baseload power during times of critical demand should be a prime objective of your Department's review.

Thank you for your consideration of our recommendations. If you have any questions, please do not hesitate to contact our offices at (202) 225-3452 or (202) 224-5754.

Sincerely,

Rep. Evan Jenkins

Sen. James Lankford

DAVID B. McKINLEY, P.E. 1ST DISTRICT, WEST VIRGINIA

2239 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515 TEL: (202) 225-4172 FAX: (202) 225-7504

www.mckinley.house.gov

COMMITTEE ON **ENERGY AND COMMERCE**

> SUSCOMMUTTEE ON ENVIRONMENT VICE CHAIR

SUSCOMMITTEE ON ENERGY

Зивсоммитее ом DIGITAL COMMERCE AND CONSUMER PROTECTION

Secretary

The Honorable Scott Perry

U.S. Department of Energy 1000 Independence Avenue S.W.

Congress of the United States House of Representatives

May 8, 2017

CHAIRMAN. CONGRESSIONAL COAL CALICUS

Со-Симв. CONDRESSIONAL BUILDING TRADES CALICUS

CO-CHAIR, CONGRESSIONAL ARTHRITIS CAUCUS

CONGRESSIONAL YOUTH CHALLENGE CAUCUS

CO CHAIR HIGH PERFORMANCE BURGINGS CAUCUS

CoulDyains CONGRESSIONAL HEARING HEALTH CALICUS

Dear Secretary Perry:

Washington, DC 20585

On behalf of the Congressional Coal Caucus, which represents thousands of coal miners, their families, and the millions of Americans who depend on coal for affordable and reliable electricity, I want to applaud you and the Department of Energy (DOE) for your April 14, 2017, memorandum that initiated an important and timely analysis of electricity markets and grid reliability.

This issue has been a priority for the Coal Caucus and on September 23, 2016, the attached letter was sent to the Federal Energy Regulatory Commission (FERC) expressing concerns that competitive markets do not adequately compensate baseload power generation and urging the Commission to investigate this matter.

As you know, electricity consumers throughout the country depend on a safe, reliable, and affordable supply of power. Baseload power plants - especially those with fuel security (fuel on site, coal) - are critical to meeting this need and ensuring the reliability and resiliency of our nation's grid. We especially need these power plants to carry the power system through extended emergencies, like we saw during the Polar Vortex in 2014. But, coal plants have been elosing at a rapid pace and many more are very much at-risk. Therefore, it is imperative that we identify why these critical power generators are closing and develop policies to prevent further closures and ensure long-term grid resiliency, reliability and energy security.

Again, thank you for initiating this DOE study and look forward to working with you on this matter. Should your staff have any questions, do not hesitate to reach out to my Policy Advisor, Blake Deeley, by phone (202) 225-4172 or by email at blake.deeley@mail.house.gov.

Sincerely,

& B. MILE David B. McKinley, P.E.

Chairman, Congressional Coal Caucus

Document 115

From:

Joyce

To:

<u>AskOE</u>

Cc:

iron549@comcast.net

Subject:

FW: Federal Power Act Section 202 (c) Tuesday, April 24, 2018 2:41:49 PM

Date: Attachments:

Federal Power Act Section 202.pdf

Good afternoon,

Please find attached a letter we filed in the past in support of baseload generation, and we urge you to issue an emergency order pursuant to Federal Power Act Section 202 (c).

Respectfully submitted,

Bengy Swanson

Iron Workers Local 549

Ph: (304) 232-2660

Fax: (304) 232-0340 iron549@comcast.net

Iron Workers Local Union No. 549

A.F.L. - C.I.O.

2350 Main Street

304-232-2660 · FAX: 304-232-0340

Wheeling, WV 26003

BENGY SWANSON

Business Manager

Fin. Secretary-Treasurer

MIGHT DUTCE

October 19, 2017

Federal Energy Regulatory Commission Secretary of the Commission 888 First Street, NE Washington, DC 20426

Re:

Grid Resiliency Pricing Rule FERC Docket No. RM18-1-000

COMMENTS OF THE IRON WORKERS LOCAL UNION NO. 549 IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in West Virginia will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

The Iron Workers Local Union No. 549 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC

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KELLY DIERKES

President

has the requisite basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Bengy Swanson Business Manager/ F.S.T. Iron Workers Local Union No. 549 2350 Main Street, Wheeling, WV 26003 304-232-2660 iron549@comcast.net

II. DESCRIPTION OF IRON WORKERS LOCAL 549

International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers.

III. DESCRIPTION OF IRON WORKERS LOCAL 549'S INTEREST IN PROCEEDING

The Iron Workers Local Union No. 549 is a party to a collective bargaining agreement with the owners of baseload coal and nuclear power plants located in West Virginia. Our members work on major infrastructure and industrial development projects that are dependent on the continued operation of the baseload coal and nuclear power plants. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, the Iron Workers Local 549 members have a direct and substantial interest in this proceeding. As well, the unique perspective

of the Iron Workers Local Union No. 549 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in West Virginia electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across West Virginia. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in West Virginia provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to Iron Workers Local Union No. 549 members. For example, AEP Mitchell Power Station, First Energy Harrison Power Station, Ft. Martin Power Station directly employs approximately 50 people, and the maintenance and capital improvement work on these plants supports the local economy by creating well-paying union jobs. In addition, the AEP Mitchell Power Station, First Energy Power Station, Ft. Martin Power Stations contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to

replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in West Virginia, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely,

the [insert shortened name or acronym] strongly urges FERC to adopt the rule proposed by the

DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will

be further bolstered by the comments considered in this proceeding. FERC has thoroughly

considered the impact of electric markets on the sustained operation of at-risk power plants and,

as noted by the Secretary of the DOE, the time to act is now given the severe impacts to system

reliability and resilience, and national security, attendant to the premature closure of crucial

power plants. Any protracted delay in creating fully compensatory market rules will only

exacerbate the problem of pre-mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a

rule that is not only compensatory (and based on the regulatory language of the Proposal) but

comprehensive and enduring. The rules to be issued by operators of organized markets should be

fair and transparent, and should ensure that critical power plants can continue to operate for the

long-term and without the prospect of repeated re-examination and adjustment to their market

compensation. The uncertainty that less than comprehensive and enduring market rules will

engender will defeat the very purpose of preserving the extended operation of these much-

needed power plants.

Respectfully submitted,

Bengy Swanson

Business Manager/F.S.T.

Iron Workers Local Union No.549

From:

Caitlin Marquis

To:

<u>AskOE</u>

Subject:

Advanced Energy Buyers Group Comments RE: DOE's Use of FPA Emergency Authority

Date:

Wednesday, April 25, 2018 5:11:53 PM

Attachments:

Advanced Energy Buyers Group Comments re FPA 202(c) 04 25 18.pdf

Secretary Perry,

I am pleased to submit the attached comments from the <u>Advanced Energy Buyers</u> <u>Group</u>, a coalition of large energy users, in response to the Department of Energy's <u>request for input</u> on the use of its authority under Section 202(c) of the Federal Power Act.

Please do not hesitate to reach out to me if you have any questions or would like to follow up with the AE Buyers Group.

Respectfully,

Caitlin Marquis

Caitlin Marquis
Manager, Federal and State Policy
Advanced Energy

Buyers Group The policyvoice of advanced energy purchasers

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mobile: (b) (6)

Web: www.AEE.net | Twitter: @AEEnet

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ADVANCED ENERGY BUYERS GROUP

the policy voice of advanced energy purchasers

Advanced Energy Buyers Group Comments Re: Federal Power Act (FPA) § 202(c)

Submitted to AskOE@hq.doe.gov

April 25, 2018

COMMENTS OF THE ADVANCED ENERGY BUYERS GROUP

The Advanced Energy Buyers Group ("AE Buyers Group" or "Group") appreciates the opportunity to provide brief comments to the Department of Energy ("DOE" or "Department") in response to the recent request from FirstEnergy Solutions ("FES"), specifically regarding the Department's potential use of its Federal Power Act ("FPA") § 202(c) authority.

The AE Buyers Group strongly urges DOE against use of its § 202(c) authority in this case because doing so is inconsistent with the statute, would be an unlawful departure from its prior use, and would undermine competitive wholesale markets while raising electricity prices at the cost of electricity consumers such as our companies. Furthermore, we note that there is no reliability or resilience emergency in PJM Interconnection ("PJM") that warrants emergency

¹ These comments represent the consensus view of the Advanced Energy Buyers Group (https://info.aee.net/ae-buyers-group). However, this document does not necessarily the reflect the position of any specific member of the AE Buyers Group, and these comments should not be attributed to any individual company or companies participating in the AE Buyers Group.

government intervention, and that even if any reliability or resilience concerns were to be identified as a result of FES's announced plant retirements, PJM already has many tools at its disposal to respond to such threats, and ample time to do so.

ABOUT THE AE BUYERS GROUP

The Advanced Energy Buyers Group is a business-led coalition of large energy users engaging on policies to expand opportunities to procure energy that is secure, clean, and affordable. Our companies are among the 71% of Fortune 100 companies and 43% of Fortune 500 companies that have established renewable and/or climate targets as part of our corporate sustainability commitments. Members of the AE Buyers Group are leading companies and organizations spanning a range of market sectors. We share a common interest in expanding our use of advanced energy, such as renewable energy like wind, solar, geothermal, and hydropower; demand-side resources like energy efficiency, demand response, and energy storage; and onsite generation from solar photovoltaics, advanced natural gas turbines, and fuel cells.

In 2017, members of the AE Buyers Group totaled over \$1 trillion in revenue and collectively consumed over 18 terawatt hours ("TWh") of electricity, including over 11 TWh hours of renewable electricity, equivalent to the electricity sales for the states of North Dakota and Delaware, respectively. This collective electricity use includes a significant footprint in the PJM region.

MOTION TO INTERVENE

The AE Buyers Group is not aware of any formal "proceeding" to consider FES's March 29, 2018 request that would require intervention (and granting of party status) to preserve its rights to fully participate under the FPA. Nevertheless, as a precaution and to preserve our rights in any

ongoing or future proceeding, the AE Buyers Group respectfully requests leave to intervene and be granted party status with respect to FES's request. Given the significant footprint of the AE Buyers Group in the PJM region and the unique perspective of the Group as described above, the AE Buyers Group submits that it has a significant interest in this matter that cannot be adequately represented by any other party.

COMMENTS

The AE Buyers Group is extremely concerned that FES's request would violate DOE's authority and disrupt wholesale markets at the expense of consumers, while ignoring readily available options to address any reliability or resilience concerns that are found to exist. The AE Buyers Group's comments are organized as follows:

- Granting FES's request would undermine competitive markets at significant cost to consumers;
- II. FES's request has not met the statutory requirements of § 202(c), and granting the request would be a significant and unlawful departure from DOE's prior use of the statute;
- III. There is no imminent resilience or reliability emergency in the PJM market, as PJM itself has made clear; and
- IV. Existing tools in the PJM market are available and more appropriate to identify and address any reliability or resilience challenges posed by retirement of FES's plants.

These comments are explained in more detail below.

I. Granting FES's request would undermine competitive markets at significant cost to consumers.

FES's request is fundamentally antithetical to the principles of competitive markets, and granting this request would increase costs and undermine market competition in the near-term while also setting a dangerous precedent and reducing confidence in the federal government's commitment to the principles of competition in wholesale electricity markets.

In particular, the AE Buyers Group is concerned that granting FES's request—which appears to be intended to apply to its entire fleet and to all other coal and nuclear plants in PJM, not just the plants slated for retirement—would disrupt the core function of competitive wholesale markets and undermine competition by limiting the ability of these markets to send accurate price signals and drive optimal, cost-effective market outcomes.² This approach is inconsistent with long-standing efforts by federal regulators and policymakers to maintain and improve the competitive wholesale markets, and would result in direct harm to our companies along with many other customers.

Wholesale markets have been very successful at accurately discovering the value of electricity production and sending efficient price signals to generators and consumers to deliver the most cost-efficient market supply outcomes. The cost-saving benefits of competitive wholesale markets have been confirmed by independent analysis, and by regional transmission organizations ("RTOs") and independent system operators ("ISOs"), including PJM.³ Clear and accurate prices

² While the AE Buyers Group notes that providing more limited relief just to the plants slated for retirement would have a smaller financial impact, the Group wishes to emphasize that there would still be a financial cost. Even more importantly, this more limited application would have the same effect of undermining confidence in markets and setting an extremely troubling precedent.

³ See Steve Cicala, Imperfect Markets versus Imperfect Regulation in U.S. Electricity Generation, University of Chicago (Jan. 2017), available at http://home.uchicago.edu/~scicala/papers/elec gov v mkt draft 2.pdf, concluding, "markets reduce production costs by \$3B per year by reallocating output among existing power plants," with some of these savings coming from a 20% reduction in the cost of operating uneconomic plants due to a 10% reduction in utilization; PJM Interconnection, PJM Value Proposition, http://www.pim.com/about-pim/value-proposition.aspx, estimating a \$2.8 to \$3.1 billion net annual benefit to customers from PJM"s operation of the competitive regional wholesale market, including \$600 million in annual savings due to enabling "less efficient generation resources to retire and to be replaced with more efficient, less costly, plants"; and, MISO, Value

in a stable policy environment are critical to enabling the development and deployment of new energy technologies that help advance economic growth while still meeting customer needs for electricity that is both reliable and resilient. Allowing cost-of-service-based regulation and undue emergency relief into this market system would, in contrast, undermine the accuracy of these price signals and result in inefficient market outcomes.

Further, in addition to our perspective as consumers highly dependent on a reliable, resilient, and affordable supply of electricity, our companies are also active participants in the wholesale electricity system, pursuing clean energy projects to meet our corporate energy and sustainability targets and to control our electricity costs. In the competitive wholesale markets regulated by FERC, we are taking full advantage of the choice afforded to us as customers to pursue long-term contracts with advanced energy installations. By inserting new cost-based rates into existing wholesale markets, and by providing cost-of-service support for uneconomic units without material benefit to the energy system, FES's request would create distortionary effects that will directly harm our existing energy supply contracts and limit our ability to pursue such transactions in the future.

Any effort to respond to and address potential threats to grid reliability and resilience should make use of market principles to encourage innovation and competition, calling upon the full suite of available options and allowing cost and performance to serve as the metric for success.

Proposition, https://www.misoenergy.org/WhatWeDo/ValueProposition/Pages/ValueProposition.aspx, finding that in 2016 MISO, "provided between \$2.6 billion and \$3.3 billion in regional benefits, driven by enhanced reliability, more efficient use of the region's existing transmission and generation assets, and a reduced need for new assets."

II. FES's request has not met the statutory requirements of § 202(c), and granting the request would be a significant and unlawful departure from DOE's prior use of the statute.

The Federal Power Act sets very specific limitations on DOE's use of § 202(c), which have not been met in this case. Specifically, § 202(c) allows DOE to intervene in the electricity industry only during an emergency that threatens national security, specifically defined as times of "war" or during "sudden" increases in demand or shortages of supply,⁴ with "emergency" defined as "unexpected . . . events [that] may be the result of weather conditions, acts of God, or unforeseen occurrences not reasonably within the power of the affected "entity" to prevent." DOE's implementing regulations specifically note that "economic factors . . . generally will not be considered as emergencies unless the inability to supply electric service is imminent. Even where 202(c) authority is found to be justified, this authority extends only to the "hours necessary to meet the emergency."

None of these statutory requirements have been met in FES's request. The FES retirement announcements will not go into effect for a matter of years, and cannot be reasonably interpreted as a "sudden" shortage of supply or an instance in which "the inability to supply electric service is imminent."

As such, granting FES's request would represent a significant disregard for the statutory requirements, and would also be a significant departure from DOE's prior use of its 202(c)

⁴ 16 U.S.C. § 824(c)(1).

⁵ 10 C.F.R. § 205.371.

⁶ *Id*.

⁷ 16 U.S.C. § 824(c)(2).

authority, which has been limited to specific emergency events (e.g., Hurricanes Katrina and Ike) and specific plants over specified periods (in response to extreme circumstances, i.e., lightning and flooding that interrupted plant construction). The FES request does not bear any resemblance to these prior uses of DOE's 202(c) authority. The AE Buyers Group sees no evidence in the statute that FES's request is within DOE's authority.

III. There is no imminent resilience or reliability emergency in the PJM market, as PJM itself has made clear.

Members of the AE Buyers Group include technology companies, manufacturers, and retailers—all sectors heavily reliant upon a reliable and resilient source of electricity. Our companies require a steady supply of electricity on a 24-hour basis, 365 days a year, and we pay a significant price for breaks in service, whether they be small disturbances to the distribution system or large outages of the bulk power system. Estimates place the cost of infrastructure failures for large enterprises at \$100,000 per hour, and for many of our businesses the costs are much higher.⁸

Given our dependence upon reliable and resilient electricity, and the consequences to our businesses of a loss of electricity supply, we carefully monitor and analyze any threats to this supply, and support necessary and cost-effective investments or actions to maintain a reliable electricity system. While there can always be incremental improvements in reliability and resilience, it is our view as engaged and highly invested consumers that FES's announced plant retirements do not present an imminent threat to reliability and resilience in PJM.

⁸ Eaton, *Blackout Tracker: United States Annual Report 2016* (2017), available at http://electricalsector.caton.com/forms/BlackoutTrackerAnnualReport, at 6.

Numerous recent assessments of the reliability and resilience of the bulk power system ("BPS") have concluded that the state of the electricity system is sound, and that it is successfully adjusting to a shifting resource mix. For example, the North American Electric Reliability Corporation ("NERC") recently reached the overarching conclusion that the state of the electricity system is sound. At a hearing before the House Subcommittee on Energy in September 2017, NERC President and Chief Executive Officer Gerry Cauley testified that "even with all the changes underway, the BPS remains highly reliable and resilient, showing improved reliable performance year over year." He also expressed confidence that the system would continue to perform well despite changes to the generation mix, stating, "With appropriate insight, careful planning, and support, I am confident the electricity sector will continue to navigate these changes in a manner that results in enhanced reliability and resilience."

Of particular importance here, we note that PJM itself made clear to DOE that FES's announced plant retirements do not threaten grid reliability or resilience. In a letter to the Secretary dated March 30, PJM wrote: "PJM can state *without reservation* there is no immediate threat to system reliability" (emphasis added). This unequivocal assessment by PJM clearly indicates that use of § 202(c) authority in response to FES's request would be unjustified.

⁹ Gerry W. Cauley, Direct Testimony before the Subcommittee on Energy, House Committee on Energy and Commerce, "Powering America: Defining Reliability in a Transforming Electricity Industry" (Sept. 14, 2017), available at http://www.nerc.com/news/Documents/HEC9-14-17%20Cauley%20Testimony%20Final.pdf, at 1.

¹⁰ *Id*.

¹¹ Vincent P. Duane, Letter to Secretary Perry Re: FirstEnergy Solutions' Request for Emergency Relief under Section 202 of the Federal Power Act (March 30, 2018), http://www.pjm.com/-/media/documents/other-fed-state/20180330-response-to-fe-solutions-request-for-emergency-relief.ashx.

IV. Existing tools in the PJM market are available and more appropriate to identify and address any reliability or resilience challenges posed by retirement of FES's plants.

The announced FES plant retirements do not pose an imminent threat, and PJM has tools to identify and address any reliability or resilience challenges posed by these retirements, as well as ample time to deploy them. Application of such tools offers a more appropriate response to FES's announced retirements—one that relies on routine implementation of PJM's established authority rather than what would be, as PJM describes it, "unnecessary, extraordinary and precedential" action on behalf of FES.

In particular, PJM notes that the plants slated for retirement "will remain operational in most cases until through May 2021," and that the retirements are not binding. In the meantime, PJM plans to follow an orderly and routine process to assess the impact of these retirements, which it outlines in its March 30 letter to the Secretary:

"PJM will undertake a thorough analysis of its system to determine whether the announced retirements would present systemic adequacy issues or any local reliability issues, such as insufficient voltage support. Should any such finding result, the PJM Tariff provides an additional 60 days to work with FES and a range of tools available, including ordering transmission system upgrades and, if necessary, offering full cost of service compensation under Part V of the PJM Tariff to induce assets to remain temporarily on-line. Ultimately, PJM could also join FES in its instant request should other remedial options prove insufficient." 12

The AE Buyers Group is satisfied that PJM is already taking steps to assess any threats to the reliability and resilience of our electricity service, and that there is sufficient time between now and the retirement of FES's plants to implement any necessary corrective measures. In the

¹² *Id*.

meantime, we see no justification for intervention by DOE that would short-circuit PJM's established process.

CONCLUSION

The AE Buyers Group appreciates the opportunity to provide input on FES's request, and we respectfully request DOE's consideration of our perspective in this case.

Signed,

The Advanced Energy Buyers Group

https://info.aee.net/ae-buyers-group

Document 117

From:

huntoon@comcast.net

To:

<u>AskOE</u>

Subject:

Supplemental Comments on FirstEnergy Request

Date:

Wednesday, April 25, 2018 9:41:24 AM

Attachments:

The Surreal, the Absurd and the Tragic RTO Insider 4-25-18.pdf

Dear Secretary and Department,

Supplementing my previously submitted comments, attached is my column published today by *RTO Insider* providing additional evidence as to why the Secretary and Department should deny FirstEnergy's request.

Respectfully submitted,

Stephen L. Huntoon

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91238%2F%3Futm_medium%3Demail%26%23038%3Butm_campaign%3DDaily%2520News%2520for%2520Paid%2520W2520Trial%2520Subscribers%2520cn%25204252018%26%23038

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COUNTERFLOW: The Surreal, the Absurd and the Tragic Edit

(https://www.rtoinsider.com/wp-admin/post php?post=91238&action=edit)

April 24, 2018

By Steve Huntoon

The Surreal

Id like to apologize — on behalf of FirstEnergy — for dragging countless congressmen into the arcane world of the electric utility industry. You we had to listen to millionaire lobbyists — the quintessential swamp — talking about stuff so dry that we who toil in this world aren't allowed to talk to our spouses about it.

And biggest apology to Sen. Manchin because you re the biggest victim. Bailout for FirstEnergy via the Defense Production Act of 1950? OMG.

Do you think if there were a scintilla of national security threat we might have heard something from, hmm, let s see, maybe the Defense Department?

But here we are.

If you re just listening to FirstEnergy s lobbylsts, you ve missed a few key facts. FirstEnergy s plants are: $^{(1)}$

- · Not base oad.
- O d not retiring premature y.
- · Inefficient.
- Unre iable.
- · Not needed for a re lab e and resi lent grid.

In the tough competition for weakest bailout argument, the winner is the argument that if we didn t have all the coal plants we had last winter, there would have been an electricity problem, which is like saying if we didn t have all the Fords we had last winter, there would be a car problem. Duh.



(https://i0.wp.com/www.rtoinsider.com/wpcontent/uploads/Steve-Huntoon-content-14-1.jpg? ssl=1)

Hun oon

All the Fords aren't disappearing overnight. And the Fords that do disappear are being replaced by better Fords.

A weaker argument for subsidizing old, inefficient and unreliable plants is hard to imagine. If it had prevailed 100 years ago, wed still be driving Model T s.

Quick Quiz

Let s see if you we been conned with a quick quiz question: The Department of Energy projects in the year 2050, 32 years from now, there will be this much coal and nuclear generation in the United States:

- 1. O gigawatts
- 2. 10 gigawatts
- 3, 100 gigawatts
- 4. 274 gigawatts

The answer is (d) 274 gigawatts. $^{(2)}$ Yes, Rick Perry s own Department of Energy projects a huge amount of coal and nuclear generation to be around for the *next 32 years*.

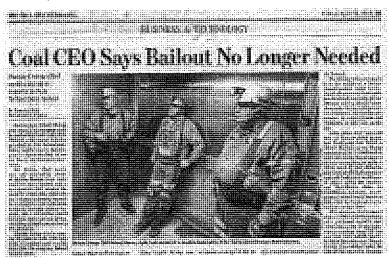
It s a con to pretend coal and nuclear plants will disappear quickly (or at all), causing any sort of reliability problem — and to premise a bailout on such fantasy.

The Absurd

The absurd is that all the responsible entities in the electric industry know there is no emergency. All the independent grid operators, the unanimous Federal Energy Regulatory Commission (where four of the five Commissioners are Trump appointees), former federal regulators, and all the independent analysts have repeatedly said that. These would be the first to warn of an emergency if one actually existed.

Compounding the absurdity, earlier this month FirstEnergy told the bankruptcy court that all its coal and nuclear plants would be operating throughout its bankruptcy proceeding. $^{[3]}$ That proceeding will take at least five to six years. $^{[4]}$

That means all the FirstEnergy plants will be operating for at least the next five or six years.



(https://i1.wp.com/www.rtoinsider.com/wp-content/uploads/WSJ-Murray-story-excerpt-content.jpg?ssl=1)

On top of that, Robert Murray, coal CEO and FirstEnergy s fellow traveler, told *The Wall Street Journal* earlier this month there was no longer any need for a bailout to save his company from bankruptcy because of increased exports to Asia. [5] He now "expects his company to thrive whether or not the Trump administration intervenes," the *Journal* reported.

There is no fire. Or even a puff of smoke.

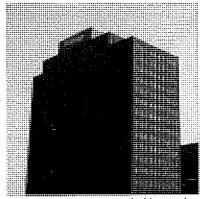
The Tragic

FirstEnergy's customers paid it \$6.9 billion in return for the company's transition from a regulated environment to a competitive environment. If that "bet" had turned out well, FirstEnergy would, of course, have kept the money. It hasn't gone as well as FirstEnergy anticipated, and now FirstEnergy wants customers to bail them out all over again.

I didn't realize just how outrageous that was until poring through the record of FirstEnergy's stranded cost proceeding in Ohio from almost 20 years ago. FirstEnergy's stranded costs were based on the difference between their regulated "net book value" and their net revenues in the future under market conditions.

Please bear with me. "Net book value" is the original cost of the plants reduced by the amount of capital that customers already have reimbursed the utility (a.k.a., depreciation). So, when FirstEnergy was paid net book value (less the future market revenues it would get to keep), it was paid the rest of the plant costs that customers hadn't already paid for.

In other words, customers have already paid for 100% of FirstEnergy's plants. FirstEnergy may retain legal title, but in equity the customers own the plants.



(https://i2.wp.com/www.rtoinsider.com/wpcontent/uploads/FirstEnergy-HQ-Wikipedia-FI-1.jpg?ssI=1)

Firs Energy's Akron, Ohio headquar ers

Can you imagine the tragedy of customers having to pay for those old, inefficient and unreliable plants all over again?

Let s hope a surreal and absurd bailout and a tragic rate increase don t come to pass. And if they do, let s hope voters figure out who s responsible.

1. A of this is common know edge in the industry. For my own takes, the non-base oad, o d and inefficient nature of these p ants is discussed here: http://www.energy-counsel.com/docs/Clunker-Poster-Child.pdf (http://www.energy-counsel.com/docs/Clunker-Poster-Child.pdf). The unre iab e nature of these p ants is discussed here: http://www.energy-counsel.com/docs/Cash-for-Clunkers-Redux-RTO-Insider.pdf (http://www.energy-counsel.com/docs/Cash-for-Clunkers-

- Redux-RTO-Insider.pdf). The ack of need for these p ants is discussed here: http://www.energy-counsel.com/docs/Counterflow_More-Smoking-Guns-for-the-Clunkers_RTO-Insider.pdf (http://www.energy-counsel.com/docs/Counterflow_More-Smoking-Guns-for-the-Clunkers_RTO-Insider.pdf). †
- 2. https://www.eia.gov/todayinenergy/detail.php?id=35572 (https://www.eia.gov/todayinenergy/detail.php?id=35572) (for coa , 195 gigawatts); https://www.eia.gov/outlooks/aeo/pdf/AEO2018.pdf (https://www.eia.gov/outlooks/aeo/pdf/AEO2018.pdf) (page 43, for coa , 79 gigawatts) †
- 3. https://www.usnews.com/news/best-states/ohio/articles/2018-04-04/utility-says-power-plants-will-stay-open-during-bankruptcy (https://www.usnews.com/news/best-states/ohio/articles/2018-04-04/utility-says-power-plants-will-stay-open-during-bankruptcy) †
- 4. https://www.ohio.com/akron/business/breaking-news-business/firstenergy-solutions-bankruptcy-could-take-years-consumer-impact-review-begins (https://www.ohio.com/akron/business/breaking-news-business/firstenergy-solutions-bankruptcy-could-take-years-consumer-impact-review-begins) \u00e7
- 5. https://www.wsj.com/articles/robert-murray-says-trump-administrations-help-not-needed-to-save-his-coal-company-1523570164?mod=searchresults&page=1&pos=3 (https://www.wsj.com/articles/robert-murray-says-trump-administrations-help-not-needed-to-save-his-coal-company-1523570164?mod=searchresults&page=1&pos=3) ↑









Additional news on this topic:



(https://www.rtoinsider.com/doe-nopr-clunkers-nuclear-units-79287/)

Counterflow -- Clunkers Shoot Selves in Foot (https://www.rtoinsider.com/doe-nopr-clunkers-nuclear-units-79287/)

Supporters of the DOE NOPR have promoted an insane rush to judgment, according to columnist Steve Huntoon. Duke Energy



(https://www.rtoinsider.com/pjm-2020-1113/) PJM Kicks Off Grid 20/20 Conference (https://www.rtoinsider.com/pjm-2020-1113/)

PJM CEO Terry Boston and Federa Energy Regu atory Commissioner Chery LaF eur kicked off PJM s third annua Grid 20/20 conference in Phi ade phia ast night.



(https://www.rtoinsider.com/pjm-memberscommittee-preview-26313/) PJM Members Committee Preview (https://www.rtoinsider.com/pjm-members-committee-preview-26313/)

A summary of the issues schedu ed to be brought to a vote at the Members Committee on Thursday during PJM's Annua Meeting.

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29	30 (https://www.rtoinsider.com/skedevents/2018 04-30/)	1 -{https://www.rtoinsider.com/skedevents/2018 05-01/}

- (https://www.rtoinsider.com/xce -energy-mwtg-spp-90911/) UPDATE: Xce Pu s out of Mountain West, Endangering SPP Integration (https://www.rtoinsider.com/xce -energy-mwtg-spp-90911/)
- (https://www.rtoinsider.com/ercot-puct-vistra-dynegy-merger-89518/) Texas PUC Conditionally Approves Vistra-Dynegy Merger (https://www.rtoinsider.com/ercot-puct-vistra-dynegy-merger-89518/)
- (https://www.rtoinsider.com/pjm-ferc-resi ience-rick-perry-first-energy-89464/) UPDATE: FES Seeks Bankruptcy, DOE Emergency Order (https://www.rtoinsider.com/pjm-ferc-resi ience-rick-perry-first-energy-89464/)
- (https://www.rtoinsider.com/pjm-doe-maria-korsnick-nuc ear-energy-institute-nei-90288/) NEI CEO: FirstEnergy Emergency Request a 'Bridging Strategy (https://www.rtoinsider.com/pjm-doe-maria-korsnick-nuc ear-energy-institute-nei-90288/)
- (https://www.rtoinsider.com/ercot-energy-efficiency-amory-ovins-90486/) Lovins: We re Only Scratching the Surface on Energy Efficiency (https://www.rtoinsider.com/ercot-energy-efficiency-amory-ovins-90486/)
- (https://www.rtoinsider.com/miso-capacity-auction- oca -resource-zones-90310/) UPDATE: MISO C ears at \$10/MW-day in 2018/19 Capacity Auction (https://www.rtoinsider.com/miso-capacity-auction- oca -resource-zones-90310/)
- (https://www.rtoinsider.com/spp-miso-ferc-michae -curran- oad-shedding-90191/) SPP Seeks FERC Meet in MISO Tx Dispute (https://www.rtoinsider.com/spp-miso-ferc-michae -curran- oad-shedding-90191/)
- (https://www.rtoinsider.com/vistra-dynegy-merger-ferc-89943/) UPDATE: Vistra-Dynegy Merger C oses After FERC Nod (https://www.rtoinsider.com/vistra-dynegy-merger-ferc-89943/)
- (https://www.rtoinsider.com/spp-board-of-directors-mountain-west-transmission-group-90317/) SPP Group Ba ks at Mountain West Concessions (https://www.rtoinsider.com/spp-board-of-directors-mountain-west-transmission-group-90317/)
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(mailto:info@rtoinsider.com)

Have Questions?

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Anti-spam: what does the "R" in RTO stand for?

Hint: territory is a synonym

Submit

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Document 118

From:

kbradley@ibew29.org

To:

<u>AskOE</u>

Subject:

Baseload Generation

Date:

Wednesday, April 25, 2018 3:54:26 PM

Attachments:

Beaver valley letter 1.pdf Beavey Valley 2.pdf

I am writing to you today to show our continued support for baseload generation which includes both nuclear and coal-fired units, these types of plants give this country the most electrical stability and resiliency possible. These plants have fuel onsite to keep them operational for many months at a time and are very dependable and are critical in maintaining the power needed to run this great country. We urge you to issue an emergency order pursuant to Federal Power Act Section 202(c).

Respectfully

Kenn Bradley

IBEW 29

Business Manager

INTERNATIONAL BROTHERHOOD of ELECTRICAL WORKERS LOCAL UNION 29

986 GREENTREE ROAD PITTSBURGH, PENNSYLVANIA 15220 WWW.IBEW29.ORG



TELEPHONE (412) 922-6969 FAX (412) 922-5649 IBEW29@IBEW29.ORG

May 15, 2017

Secretary Perry
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Perry,

Unions, labor and power plant workers across the county applaud the Department of Energy's study examining electricity markets, the value of baseload power and the long-term security and resiliency of the electric grid. Baseload coal and nuclear power plants employ more than 154,000 workers, produce major infrastructure projects that put Americans to work, and support a resilient electric grid. Local Union 29 represents over 500 of these power plant workers in Western Pennsylvania that work in nuclear and coal plants.

Baseload power plants have long been the "work horses" of the electric system, providing energy to customers 24 hours a day, 365 days a year. With significant on-site fuel reserves, they provide the resiliency required to keep electricity flowing under all circumstances since their operation is not subject to interruption by extreme events such as weather or attacks on infrastructure that disrupt fuel delivery to other generation resources. Recently, EPA Administrator Pruitt noted as much when he talked about the consequences of an attack on key infrastructure. Our nation's security is dependent on maintaining these plants to support a resilient supply of electricity.

However, numerous baseload power plants have permanently shut down in recent years, and many more are expected to close prematurely in the very near future. Once they are gone, they are gone for good. Baseload generation is under serious threat from market-distorting subsidies and mandates, regulations that target these resources, low natural gas prices and markets that don't value resiliency. We are at a crisis point. Further decline in the number of plants will not only impact the grid and national security, it will cost valuable jobs and discourage industrial development opportunities nationwide. This is an outcome America simply can't afford.

Our baseload power plants and the dedicated, skilled workers who operate them are the lifeblood of their communities. They deliver a strong tax base and support between three and eight times more high-paying jobs than do other forms of electricity generation. We depend on these plants to create a robust workforce, and the country depends on them to support a healthy economy and electricity supply.

Unless action is taken, the long-term viability of baseload power plants along with the jobs and substantial economic opportunities they bring is at risk. And, our national security could be compromised if we don't ensure a resilient grid. We encourage the Administration to take prompt and meaningful action to protect baseload power plants and America's energy future.

Sincerely

Business Manager

Saus

October 17, 2017

Federal Energy Regulatory Commission Secretary of the Commission 888 First Street, NE Washington, DC 20426

Re:

Grid Resiliency Pricing Rule

FERC Docket No. RM18-1-000

COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, LOCAL UNION 29 IN SUPPORT OF THE PROPOSED RESILIENCY RULE

On September 28, 2017, the Department of Energy ("DOE") issued the "Grid Resiliency Pricing Rule" (the "Proposal") directing the Federal Energy Regulatory Commission ("FERC") to adopt a rule requiring operators of organized markets to "ensure that certain reliability and resiliency attributes of electric generation sources are fully valued." Such a rule, as contemplated by the regulatory language of the Proposal, will ensure that existing nuclear and coal-fired electric generating stations in Pennsylvania will be compensated appropriately and fully for their costs of operation and will avoid premature retirement. Adoption of that rule will thus sustain the long-term viability of critical power plants, preserve and create jobs, maintain electric reliability, and provide substantial economic benefits to the many hard-working Americans living throughout the region.

IBEW Local 29 strongly supports the Proposal and shares the Secretary's urgency that FERC act promptly to direct operators of organized markets to issue the requested rule. FERC has the ability to act, and must act, without undue delay to avoid premature closure of crucial power plants and our members' loss of critical economic and reliability benefits. FERC has thoroughly examined how electric markets function and how those markets affect the continued operation of crucial power plants needed for reliability for some time. FERC has the requisite

basis to act now. There is no time for delay. In addition to acting promptly, FERC should also direct organized market operators to issue a comprehensive and enduring set of rules, based on the regulatory language of the Proposal, for the proper compensation of critical power plants. Protracted proceedings undertaken by organized market operators that fail to develop fair, compensatory and transparent rules will only engender market uncertainty and delay in providing sufficient compensation to these facilities, thereby jeopardizing the operation of the very plants that the DOE seeks to maintain in operation.

I. COMMUNICATIONS

All communications, correspondence, and documents related to this proceeding should be directed to the following person:

Kenn Bradley
Business Mgr.
IBEW Local 29
986 Greentree Road, Pittsburgh, PA 15220
412-922-6969
kbradley@ibew29.org

II. DESCRIPTION OF IBEW LOCAL 29

IBEW Local 29 is a progressive labor organization that represents individuals in the Utility, and Generation industries.

III. DESCRIPTION OF IBEW LOCAL 29'S INTEREST IN PROCEEDING

IBEW Local 29 is a party to collective bargaining agreements with the owners of baseload coal and nuclear power plants located in Pennsylvania. As a result, the wages, terms and conditions of employment of its members may be directly affected by the actions taken by the FERC and operators of organized markets in this proceeding. Thus, IBEW Local 29 members have a direct and substantial interest in this proceeding. As well, the unique perspective of IBEW Local 29 and its members will only serve to enhance the record in this proceeding.

IV. COMMENTS

The communities where struggling baseload coal and nuclear power plants are located are dependent on the jobs and economic development opportunities the power plants provide. The recent decline in Pennsylvania's electric power industry, for example, has led to reductions in operations and capital improvement expenditures at numerous power production and manufacturing facilities across Pennsylavania. This has led to extreme hardship for the thousands of union workers employed in this industry as well as their families.

It is imperative that baseload coal and nuclear plants continue to operate in light of these dire circumstances. Baseload coal and nuclear plants in Pennsylvania provide thousands of MWs of reliable power, and provide union jobs and economic opportunities to IBEW Local 29 members. The Beaver Valley, Cheswick, and Brunot Island generation stations directly employ approximately 500 IBEW Local 29 members, and the maintenance and capital improvement work on these plants supports the local economy by creating thousands of well-paying union jobs for contractors. In addition, these plants contribute millions each year in state and local tax revenues that support local schools, police and fire departments and other vital public services. The loss of jobs, tax revenue, and the ripple effect of such losses throughout the local economy, will have a severely detrimental impact on the region.

The issuance of a rule preserving the continued operation of resilient baseload coal and nuclear power plants will maintain a reliable supply of electricity for the region's energy-intensive economy in two ways. First, the preservation of certain plants will avoid the need to replace lost generation with imports and the associated construction of infrastructure to facilitate such importation. Preserving baseload coal and nuclear power plants will keep these needed,

reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

Second, premature plant closures will deplete the stable of highly skilled (and specifically trained and experienced) employees, many of whom have lived in the region for several years and who take great pride in their work. With a depletion of this skilled and experienced group of workers, and the possible replacement of these workers with more distant and perhaps less-skilled individuals, we will see a direct and adverse impact on our ability to maintain the generation facilities that continue to operate and, as important, our ability to respond promptly to severe contingencies affecting the operation of these remaining plants in operation. In short, allowing baseload coal and nuclear power plants to close prematurely will have an adverse impact on the reliability of the region's electricity supply and on the reliable operation of the regional electricity system.

Rates for the sale of electricity that are inadequate to sustain the operation of base load generation facilities that provide reliability and resiliency support cannot be considered to be just and reasonable. Because of the loss of jobs, the significant reduction in payments to local governments, and the decline in electricity resource and grid reliability that would result from deactivation of the nuclear and coal-fired generating facilities in Ohio, it is essential that the FERC adopt a rule, such as that proposed by DOE, which will ensure that such generating facilities are fully compensated for their costs and will remain in operation.

In order to mitigate the risk that such generating units may be deactivated prematurely, IBEW Local 29 strongly urges FERC to adopt the rule proposed by the DOE as promptly and comprehensively as possible. FERC has a sufficient record to act that will be further bolstered by

20171017-5092 FERC PDF (Unofficial) 10/17/2017 1:16:12 PM

the comments considered in this proceeding. FERC has thoroughly considered the impact of

electric markets on the sustained operation of at-risk power plants and, as noted by the Secretary

of the DOE, the time to act is now given the severe impacts to system reliability and resilience,

and national security, attendant to the premature closure of crucial power plants. Any protracted

delay in creating fully compensatory market rules will only exacerbate the problem of pre-

mature closures.

In acting promptly, FERC should also direct the organized market operators to issue a

rule that is not only compensatory (and based on the regulatory language of the Proposal) but

comprehensive and enduring. The rules to be issued by operators of organized markets should be

fair and transparent, and should ensure that critical power plants can continue to operate for the

long-term and without the prospect of repeated re-examination and adjustment to their market

compensation. The uncertainty that less than comprehensive and enduring market rules will

engender will defeat the very purpose of preserving the extended operation of these much-

needed power plants.

Respectfully submitted,

Kenn Bradley Business Manager IBEW Local 29

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Timothy W. Burga PRESIDENT Pierrette M. Talley SECRETARY-TREASURER

American Federation of Labor and Congress of Industrial Organizations

October 20th, 2017

Federal Energy Regulatory Commission Secretary of the Commission 888 First Street, NE Washington, DC 20426

RE:

Grid Resiliency Pricing Rule

FERC Docket No. RM 18 - 1 - 000

COMMENTS OF THE OHIO AFL-CIO IN SUPPORT OF THE PROPOSED GRID RESILIENCY PRICING RULE

As the Labor Federation in Ohio, representing over 500,000 workers including those in all aspects of the generation and distribution of energy, we support the proposed Grid Resiliency Pricing rule. The Ohio AFL-CIO has maintained an "all of the above energy strategy" that allows for a diversified energy portfolio. We believe that the proposed Grid Resiliency Pricing Rule falls within that strategy. If adopted, the proposed rule will ensure that existing nuclear and coal-fired electric generating stations in Ohio will be fairly compensated for their costs of operation and avoid premature retirement.

The importance of these plants remaining operational cannot be overstated. We have seen the devastation that occurs in our communities when major employers leave a region. Ohio's industrial economy has been hit disproportionately hard with the loss of over 320,000 manufacturing jobs in the last decade alone. These generating stations are, in some cases, the largest employers and catalysts for economic prosperity and growth in these areas. The continued operation of these plants is necessary for current energy needs and a major factor in attracting new businesses and economic development.

These energy facilities are crucial for the livelihood and viability of the thousands of workers who operate and maintain them, their families, and the communities in which they live. These plants contribute millions of dollars each year in state and local tax revenue that support local schools, police and fire departments, and other vital public services. If these plants close, the loss of jobs, tax revenue, and the ripple effect of such losses will be felt in every corner of Ohio.

Furthermore, the continued operation of the Davis-Bessie and Perry Nuclear Facilities, as well as the Bayshore, JM Stuart, Kyger Creek and Killen coal-fired plants are necessary to maintain a reliable supply of electricity for the region's energy intensive economy and grid stability. Preserving base load coal and nuclear power plants will keep these needed, reliable facilities running close to home without the need to depend on distant resources, particularly during catastrophic events like severe storms, to fulfill our region's dynamic need for reliable electricity.

www.ohaflcio.org



For these reasons the Ohio AFL-CIO supports the proposed Grid Resiliency Pricing Rule. It is of utmost importance to workers in these facilities, the communities in which they live, and grid stability that the Commission deliberates in a timely manner and issues a final rule. Thank you for your consideration and please do not hesitate to contact my office with any questions.

Respectfully submitted,

Tim Burga, President

From:

Kemper, Craig

<u>AskOE</u>

Subject:

Bicameral Letters Regarding FPA 202c Emergency Authority

Date:

Thursday, April 26, 2018 8:48:35 PM

Attachments:

2-21-2018 Final Signed Letter to the President on Electric Grid Resiliency.pdf 4-26-2018 Signed Addendum Letter to President re Grid Resiliency.pdf

To Whom it May Concern,

Please see attached for two letters sent to the President regarding 202c Emergency Authority as it relates to electric grid resiliency. The attachments are in PDF format.

Please let me know if there are any issues opening either of them.

Regards,

Craig Kemper

Legislative Counsel

Office of Representative Keith J. Rothfus, PA-12

1205 Longworth House Office Building | Washington, D.C. 20515

Office: 202-225-2065 | Fax: 202-225-5709

Congress of the United States Mashington, DC 20515

February 21, 2018

The Honorable Donald J. Trump President of the United States The White House 1600 Pennsylvania Avenue, NW Washington DC 20500

Dear Mr. President.

We write to express our concern regarding the preservation of our nation's fuel-secure generation capacity and threats to the resiliency of the nation's electric grid. We must ensure that the grid provides affordable, reliable, and resilient electricity on a daily basis. As a matter of both national and economic security, the electric grid must have the resiliency to respond to extreme circumstances.

Fuel-secure baseload generators, primarily coal and nuclear, are under duress. An alarming number of coal and nuclear plants have closed prematurely and more are closing at a fast rate. This is especially true in the competitive, so-called merchant markets. The rate of plant closures has a compounding effect on grid resiliency – the ability to operate through an emergency or extreme conditions – by placing undue risk of severe consequences on the system.

Our nation's nuclear and coal plants are predominantly immune to short-term fuel supply disruptions, which makes them resilient. Evidence of how integral they are to the U.S. was demonstrated in 2014 when the Polar Vortex overstressed the grid, and many generation sources were unable to respond to power needs because of fuel supply disruptions. When the grid in much of the U.S. narrowly avoided operational failure, it was fuel-secure baseload power plants and not variable sources of electricity or those with interruptible fuel supplies that provided a resilient source of electricity.

A major factor putting coal and nuclear plants at a disadvantage are federal and state subsidies to intermittent power providers, making them artificially competitive. Additionally, government mandates for purchases of certain forms of electricity and excessive regulations on nuclear and coal providers negatively impact those resources' cost competitiveness. Adding to those headwinds, grid operators (Regional Transmission Organizations – RTOs) fail to create market rules that fairly compensate fuel-secure baseload generators for the resiliency they provide the grid. Coal and nuclear generators

maintain adequate fuel on-site to ride through an extended emergency, and do so without being compensated for that.

Beyond the risk injected into the electric grid carried over from the previous administration, there are national economic concerns at play too. If anti-resiliency bias within the RTOs' pricing models persists, thousands of workers and their families will be negatively affected. For generations, nuclear and coal have provided well-paying jobs in communities across America. Further plant closures will have huge negative economic effects, rippling across entire regions and drive up electric prices for ratepayers. Without your immediate help, these industries will not be able to provide the good jobs and the resilient electricity supply our nation currently has.

Mr. President, we are asking you to safeguard the grid's fuel security and direct the Secretary of Energy to exercise his Section 202(c) emergency powers under the Federal Power Act. We also request the Department of Energy evaluate the announced and expected retirement of additional fuel-secure baseload generation units and the potential national security and economic ramifications. Gambling with the resiliency of the electric grid is unnecessary and puts the safety of all Americans at risk.

We applaud the extraordinary efforts you have already made to help turn our nation's struggling economy around, especially for middleclass workers. We hope that you will recognize the immediate severity of this issue and will take appropriate action to safeguard the electric grid's resiliency.

Thank you for your leadership, and your efforts to ensure that our nation has a safe and resilient electric grid.

Sincerely,

Keith J. Rothfus

Member of Congress

David B. McKinley, P.E.

Member of Congress

Shelley Moore Capito

U.S. Senator

is Stelley Mone Capita

Mitch McConnell

U.S. Senate Majority Leader

Steve Stivers Member of Congress Member of Congress Scott Perry **Member of Congress** Mike Kelly Member of Congress James Comer **Member of Congress** Warren Davidson Member of Congress

U.S. Senato

Alexander X. Mooney Member of Congress Evan Jenkins Member of Congress David P. Joyce **Member of Congress** Mke Bost Member of Congress Bill Johnson Member of Congress

Rodney Davis Member of Congress

H. Morgan Griffith Member of Congress

H Mgulffl

BU Dill

Bob Gibbs Member of Congress

Robert E. Latta

Member of Congress

Jim Jordan

Member of Congress

Dlew GT Thompson

Glenn "GT" Thompson Member of Congress

Larry Bucshon, M.D.

Member of Congress

Congress of the United States Washington, DC 20515

April 26, 2018

The Honorable Donald J. Trump President of the United States The White House 1600 Pennsylvania Avenue, NW Washington DC 20500

Dear Mr. President.

We write to reiterate an immediate concern about our nation's electric grid. This letter is an addendum to the correspondence sent to you February 21st about national security concerns relating to the electric grid's resiliency.

On January 21, 2018, New England's electric transmission system operator, ISO New England (ISO-NE), released an Operational Fuel-Security Analysis. The analysis cites significant concerns not merely with grid resiliency, but also with reliability. On page 4 it states that "fuel-security risk – the possibility that plants won't have or be able to get the fuel they need to run, particularly in winter – is the foremost challenge to a reliable grid in New England." It goes on to assert that "the retirements of coal-fired, oil-fired, and nuclear generators – resources with fuel stored on site – will have a significant impact on reliability and magnify the importance of other variables, particularly liquefied natural gas (LNG) supplies."²

The analysis reports on page 53 that "fuel-security risks are present in the vast majority of cases, even in scenarios with higher LNG, renewables, and imports." These are striking admissions in an overall alarming report warning of increased risk of rolling blackouts.³

Mere days after ISO-NE released its analysis, various media outlets reported that the nation's first ever shipment of *Russian-sourced* LNG docked in Boston to relieve New England of an energy shortage. It is unconscionable that any part of our nation needs to purchase energy from a hostile nation in order to keep homes warm and the lights on. The U.S. has long pursued a policy of energy independence precisely because it is a national security issue. This threat is real and growing every day because of short-sighted policy driving domestic fuel-secure baseload generators offline and out of the marketplace.

¹ id.

¹ ISO New England, Operational Fuel-Security Analysis (January 17, 2018), available at http://www.isone.com/static-assets/documents/2018/01/20180117_operational_fuel-security_analysis.pdf

³ Id at 53.

Furthermore, the Department of Energy's National Energy Technology Laboratory (NETL) examined the wave of premature baseload plant closures in a March 13, 2018 report. NETL studied the Bomb Cyclone that plunged many parts of the nation into a deep freeze from December 27 through January 8. On page 3, the report states that "during the worst of the storm from January 5-6, 2018, actual market experience demonstrated that without the resilience of coal - and fuel oil/dual-firing plants - its ability to add 24-hour baseload capacity - the eastern United States would have suffered severe electricity shortages, likely leading to widespread blackouts."4 Regarding the PJM Interconnection on page 17, it states that "had coal been removed, a 9-18 GW [gigawatt] capacity shortfall would have developed, depending on assumed imports and generation outages, leading to a system collapse,"5

Only days ago on March 29th, FirstEnergy Solutions, one of the largest generators of electricity to PJM, filed notices with federal officials of intentions to close three nuclear plants. These notices preceded the company filing for Chapter 11 Restructuring on March 31st. This significant news is yet another hit to the grid's resiliency and our national security.

Mr. President, please protect our nation from such premature plant closures, as well as the dangers posed by hostile nations having influence on the US electric grid.

The following members support the continued request for the Secretary of Energy to exercise his Section 202(c) emergency powers under the Federal Power Act or any other applicable statutory authority.

We continue to thank you for your efforts to keep our nation and electric grid safe and resilient

Sincerely,

Member of Congress

Member of Congress

Stelley Mone Capita Shelley Moore Capito

U.S. Senator

Cc: The Honorable Rick Perry, Secretary of the US Department of Energy

A National Energy Technology Lab, US Department of Energy, Reliability, Resilience, and the Oncoming Wave of Retiring Baseload Units, Volume 1: The Critical Rale of Thermal Units during Extreme Weather Events (March 13, 2018), available at: https://netl.doe.gov/research/energy $analysis/temp/Reliability and the Oncoming Wave of Retiring Baseload Units Volume The Critical Role of Thermal Units_03$ 1318.pdf

⁵ id at 17.

Joe Manchin III **Chris Stewart** U.S. Senator **Member of Congress** David P. Joyce Evan Jenkins Member of Congress Member of Congress alex X. Mas James Comer Alexander X. Mooney Member of Congress **Member of Congress Scott Perry** Mike Bost Member of Congress **Member of Congress**

Morgan Origin Member of Congless

Andy Barr Member of Congress Hal Rogers Member of Congress

Steve Stivers

Member of Congress

Bob Gibbs **Member of Congress**

Warren Davidson **Member of Congress**

Lloyd Smucker Member of Congress

Paul A. Gosar, D.D.S. **Member of Congress**

Rodney Day

Member of Congress

Document 121

From:

Will Campbell

To:

<u>AskQE</u>

Subject:

First Energy and 202c

Date:

Friday, April 27, 2018 2:18:58 PM

As a consumer, electrical user- and voter- in an area that First Energy's 202c petition covers, I want to express my disappointment with the DOE, and President Trump (assuming he goes along with this) for even considering their request, as it not only has no merit on it's face, but has already been rejected in a similar form by the FERC.

First Energy and their failed business decisions need to be tested by the market, and not rescued by improper, and possibly illegal, use of section 202© of the Federal Power Act.

We are not on a wartime footing, we don't have a capacity problem, and there is no other rational reason to rescue a company and their soon-to-be stranded assets.

Bailing out a private company at taxpayer expense for no good reason except politics is the modern definition of corruption. Please re-read the FERC decision on a similar request by First Energy and understand why they rejected a similar proposal.

Thank you,

Will Campbell

From:

Kalagher, Kendali

To:

<u>AskQE</u>

Subject: Attachments: Congressman Joyce Submission for Section 202 C Filing Friday, April 27, 2018 9:19:15 AM

Date:

image001.png image002.png image003.png

10 20 17 Letter to FERC Re Baseload Power.pdf

Good morning,

On behalf of Congressman Joyce, I am submitting the attached letter from several Members of Congress regarding baseload power. Mr. Joyce sent this letter in October to FERC and would like to now submit it for the comment period on the recent filing FES made on Section 202.

Please confirm receipt and let me know if anything else we can provide on our end in the meantime.

Thank you,

Kendall

Kendall Kalagher

Senior Legislative Assistant

Office of Congressman David P. Joyce (OH-14)

1124 Longworth House Office Building

Washington, D.C. 20515

(202) 225-5731







Congress of the United States House of Representatives

Washington, DC 20515-3514

October 20, 2017

Chairman Neil Chatterjee Commissioner Cheryl A. LaFleur Commissioner Robert F. Powelson Federal Energy Regulatory Commission 888 First Street, NE Washington, D.C. 20426

Dear Chairman Chatterjee, Commissioner LaFleur, and Commissioner Powelson,

We write to thank the Department of Energy and Federal Energy Regulatory Commission (FERC) for initiating a rulemaking to help ensure a secure, resilient, and reliable U.S. electrical system. This will be accomplished by preserving the baseload power plants that form the backbone of our electric grid.

Our nation depends on an affordable, reliable, and secure supply of electricity produced by diverse energy resources. Baseload power plants are the only resources that can operate around the clock to support the energy demands of customers, businesses, and industries. These plants operate in all types of weather, and because they maintain large reserves of on-site fuel, they are not sensitive to fuel supply disruptions.

Preserving baseload plants also promotes a strong American economy. These facilities are economic engines that provide thousands of jobs not only at generating facilities and throughout the supply chain, but also in the small businesses, restaurants, entertainment venues, and other industries that comprise the communities around these plants. Local schools, police and fire departments, and other vital community services rely heavily on tax revenues paid by these facilities.

The current market structure, which undervalues baseload generation, has led to these plants closing prematurely at an alarming rate. These closures have resulted in an electrical grid with weakened resiliency and a diminished ability to respond to crisis.

A logical way to address this issue is to develop and implement market rules that appropriately compensate fuel-secure baseload generating plants. America's energy future depends on preserving a diverse, resilient, dependable, and secure energy supply. We appreciate your commitment on this matter and respectfully urge your swift action to develop and implement market rules that will prevent premature baseload plant closures, consistent with the rules and regulations of the Commission.

Respectfully,

David P. Josce) | Member of Congress Bob Gibbs

Meinber of Congress

Michael M Churca Michael R. Tumer Member of Congress Member of Congress Member of Congress Member of Congress Jim Jordan () Member of Congress Warren Davidson Member of Congress Steve Stivers Member of Congress Member of Congress Joyce Beatty

Member of Congress

Brad Wenstrup Member of Congress From:

John E. Shelk

To:

<u>AskQE</u>

Subject: Date: EPSA LETTER TO SECRETARY PERRY Friday, April 27, 2018 2:12:53 PM

Attachments:

image001.jpg

DOE EPSA LETTER FINAL 042718.pdf

Please see the attached letter from EPSA to Secretary Perry.

John E. Shelk

President & CEO

Electric Power Supply Association (EPSA)

1401 New York Ave., N.W., Suite 950

Washington, D.C. 20005

202-628-8200 (main)

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(b)(6)

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(202) 628-8200

April 27, 2018

The Honorable James Richard Perry Secretary of Energy United States Department of Energy 1000 Independence Avenue, S.W. Washington, DC 20585

Dear Secretary Perry:

This letter builds on the joint filing dated March 30, 2018, that the Electric Power Supply Association (EPSA) co-signed with ten other entities in response to the application filed by FirstEnergy Solutions for an emergency order under section 202(c) of the Federal Power Act, and EPSA's subsequent letter to President Trump dated April 12, 2018.

More recently, press reports indicate that the Administration is also reviewing potential statutory authorities under the Defense Production Act to subsidize certain existing coal and nuclear plants with which EPSA members compete in the PJM Interconnection regional grid that operates federally regulated wholesale power markets. Furthermore, EPSA understands that the Department also may be considering Section 215A of the Federal Power Act as added by the FAST Act which provides new authorities intended to be used to address cyber security emergencies.

Reliability and resilience in PJM and other regions with organized wholesale markets depend on financially viable power plants using the full range of fuels and technologies. The power plants that together comprise the bulk power system in these regions are operated by several different types of owners, including independent power producers that EPSA represents, not just those utility-affiliated generators seeking one-off, narrow subsidies for themselves.

Viewing the complex, inter-related power grid solely through the narrow and parochial lens of subsidy requests from individual market participants, such as FirstEnergy Solutions, or categories of fuels, such as coal and nuclear, will make wholesale markets worse off, not better. This is especially so given that all power suppliers face a range of challenges. The policy choices facing the Administration should not be limited to either the status quo or even more subsidies. Subsidies are contagious. As the market share subject to competition continues to shrink from fuel-based preferences, both federal and state, there will be woefully insufficient megawatts to compete for by those not subsidized. At that point, everyone will require non-market payments. Thus, the policy choices the Administration is examining should also include the best choice, which is eliminating discriminatory and fuel-specific "thumbs on the scale" for electricity.

The Department's policy review should not be based on statutes such as FPA Section 202(c), the Defense Production Act, and Section 215A of the Federal Power Act (FAST Act) that were never intended to be used to establish economic support arrangements for entire sub-categories of generating facilities. By limiting its review in this fashion, the Department is unnecessarily confining itself to adding yet another thumb on the scale by creating a new broad federal subsidy program. While some may view this as rebalancing what was done by the prior Administration, that simply invites others to engage in further rebalancing in the future. Such uncertainty is inherently inconsistent with making substantial investments at market risk in long-lived assets to achieve your goal of improving electricity infrastructure for the future.

The Department should not miss this historic opportunity to promote competition and open markets. Effective competition will achieve the type of secure, reliable and resilient "all-of-the-above" mix of generating facilities the Administration seeks. To this end, EPSA suggests a bold and courageous approach that reduces and then removes subsidized forms of generation from distorting competitive generation markets. This can be achieved on parallel paths:

- The Department of Energy should lead an effort to review all existing subsidies related to power generation and, to the extent it is determined that such subsidies are no longer needed or effective, work with Congress and other relevant federal agencies to eliminate those that distort markets; and,
- The Federal Energy Regulatory Commission should swiftly conclude several
 pending dockets through which the Commission must develop and implement
 effective rules to protect competitive wholesale power markets from the
 parasitic and distorting effects of material discriminatory subsidies, both
 federal and state, whether supply-side or on the demand side of the electric
 meter.

The focus among many federal and state energy regulators over the last several decades has been to work to transition an industry once focused almost exclusively on extensive regulation and cost-of-service reimbursement to an industry that values competition over regulation and depends on market forces to incentivize both new investment and market participant behaviors that maximize system reliability.

We have learned a lot from these efforts. First and foremost, *markets work* and, when impediments and distortions are removed from markets, *they work better*. The second thing we have learned is that, when there are concerns that the markets are not creating adequate incentives to build or retain generating units that have the attributes that the power system needs to be reliable and resilient, the best way to address those needs is through new market-based initiatives that are *fuel neutral*. For example, new products and a full suite of attributes can be introduced into the existing markets (like PJM's capacity performance product) and generating facilities can then compete to provide these products and *all* required attributes in cost-effective and innovative ways.

The approach EPSA is recommending does not prevent States from making their own resource decisions, one way or the other. If a State wishes to incentivize or provide cost support for a specific type of generation, it will continue to be completely free to do so. But, it is essential to also respect the choices made by those States that elect not to subsidize specific resource types. Thus, regardless of the State in which they are located, those generating facilities that have not been subsidized must be protected from the market distortions that occur when subsidized resources are permitted to participate in the wholesale markets without limits. Absent adoption of effective countermeasures to protect the integrity of the wholesale power markets that FERC regulates, the subsidized subset of competitors will have an unfair artificial advantage competing with unsubsidized resources to clear wholesale energy and capacity markets on which the unsubsidized resources totally rely for revenues to remain viable.

Similarly, if in the future the Department determines that specific energy assets need emergency support for identified national security reasons, any temporary cost reimbursement that is provided to the relevant asset owners needs to occur outside of these markets, so that un-subsidized resources and their customers do not bear the brunt of providing funding for what will be an emergency or national security issue.

We think the choice is clear. Removing market distortions and ensuring that the power plant attributes that the system needs are compensated within the market on a competitive basis will allow an all-of-the-above strategy to continue to be successful. Doing so will ensure that it works into the future in a manner that incentivizes and spurs new investment and innovation along the way.

We look forward to working with you in addressing the Department's very important goals for the nation's energy systems including its organized wholesale power markets.

Sincerely.

John E. Shelk President & CEO

Electric Power Supply Association (EPSA)

plus Sher-

Paul Greenwood President

ExxonMobil Power & Gas Services 22777 Springwoods Village Parkway Spring, TX 77389 832 624 7235 Telephone Paul.greenwood@exxonmobil.com

EXonMobil

April 27, 2018

Department of Energy c/o AskOE@hq.doe.gov

RE: Federal Power Act section 202(c)

ExxonMobil Power and Gas Services Inc., an affiliate of Exxon Mobil Corporation, and ExxonMobil Gas and Power Marketing Company, a division of Exxon Mobil Corporation, appreciates the opportunity to submit these comments to the Department of Energy.

Exxon Mobil Corporation, collectively with its affiliates (ExxonMobil), constitute one of the largest U.S. suppliers of natural gas, as well as a major purchaser of electricity for its own operations. The energy we produce and the products we refine underpin the nation's economic prosperity, security, and the lifestyles American citizens enjoy. We have a long history of working with federal, state and local governments during times of emergency to ensure economic, commercial and individual recovery occurs as quickly as possible and that government priorities are swiftly addressed.

We not only oppose FirstEnergy Solutions Corporation's proposal to request invocation of governmental emergency authority in order to address its business situation ("Proposal"), but also are disappointed that an energy company would file such a request. There is no emergency facing the U.S. power grid or industry. Invocation of emergency authorities as requested would establish a troubling precedent for the future as the U.S. energy system continues to evolve.

The main arguments against the invocation of section 202(c) authority – or any other governmental emergency authority – are provided below. Additional details are provided in the filings of the American Petroleum Institute and the Natural Gas Supply Association, whose comments we support.

- No emergency exists. Numerous reports, including one by the EIA as well as
 comments by the grid operators, confirm that fact. Any concerns about prospective
 grid emergency scenarios, including cybersecurity, are best addressed by engaging
 with the operators as well as FERC. The market is evolving naturally by welcoming
 modern, efficient, flexible generation sources.
- Grid resilience and fuel diversity are complex issues which are being actively worked by subject matter experts with a stake in the outcome. Artificially retaining uncompetitive power sources is an overly simplified and ineffective response, whether those sources are coal, nuclear, gas, or renewables. The market should provide the opportunity for generation sources to compete based on their inherent capabilities, limitations, and long-term economics.

- Well-functioning markets are the best means for achieving the optimal blend of resilience, fuel diversity, and affordability. While electricity markets are not perfectly competitive, they have clearly and intentionally moved in that direction in recent decades. However, adding distortions on top of existing distortions would reverse that trend, and create economic uncertainty for current and potential future investments in the market. It would also tip the scales against technical innovation and market flexibility.
- Electricity consumers, from homeowners to small businesses to large industrial
 operators, would be harmed by higher electricity prices. Their voice has largely been
 lost in the current debate the media tends to focus on bankruptcies and lobbying
 campaigns by companies and creditors as has the adverse economic impact that
 would result from actions on the Proposal or similar federal interventions. These
 factors should be carefully considered before any action is taken.

In summary, the recently-announced retirements of several coal and nuclear plants is not creating an emergency in the electricity industry. Undertaking emergency action in the present context would cause numerous adverse consequences for essentially all participants in the electricity market, from generators to end consumers, and be contrary to market principles.

The President and Secretary have considerable authority to act in the event of a true emergency, and that authority should be constrained to and reserved for those limited circumstances. As noted, ExxonMobil stands ready to assist during those times.

We therefore urge that FirstEnergy's extraordinary request for the invocation of federal emergency powers be rejected, along with any similar options being considered, and that FERC be allowed to continue with its deliberate and thoughtful approach toward examining and addressing grid resiliency issues. FERC's approach is the established means to engage with industry to improve the grid and the power markets, and to continue to enhance U.S. competitiveness and security.

Sincerely,

Paul Greenwood

President

ExxonMobil Power and Gas Services Inc.*

^{*} ExxonMobil Power and Gas Services Inc. purchases power and natural gas for many of ExxonMobil's U.S. facilities.

From:

Kay Squires

To:

AskOE

Cc:

Bette J. Dodd; SBruce@mcneeslaw.com; bweishaar@mcneeslaw.com; Amanda Tyler

Subject:

DOE / FirstEnergy Solutions Corp."s Request for Emergency Action

Date: Attachments: Friday, April 27, 2018 1:20:S2 PM

LK logo 2013wline.png

BFF45B1D-FC35-4d5b-968B-A51F89D613B5.jpg

Catanzaro 4-26-18.pdf

Attached for filing please find a letter from the *Indiana Industrial Energy Consumers, Inc. (INDIEC)* regarding FirstEnergy Solutions Corp.'s Request for Emergency Action, in which INDIEC opposes any federal response to take action to interfere with retiring power plants.

Thank you.

	website map	website map	
Kay Squires			
Administrative Director			
LEWIS KAPPES One American Square, Suite 2500 Indianapolis, IN 46282 P: 317.639.1210 F: 317.639.4882 E: KSquires@lewis-kappes.com			

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Indiana Industrial Energy Consumers, Inc.

One American Square, Suite 2500 Indianapolis, IN 46282 Tel: (317) 639-1210 Fax: (317) 639-4882 www.indiec.com

April 26, 2018

VIA EMAIL

Mr. Michael Catanzaro, Special Assistant to the President, Domestic Energy and Environmental Policy The White House 1600 Pennsylvania Ave. NW Washington, DC 20500

Re: FirstEnergy Solutions Corp.'s Request for Emergency Action

Dear Mr. Catanzaro,

I am writing you on behalf of the Indiana Industrial Energy Consumers, Inc. ("INDIEC"), regarding FirstEnergy Solutions Corp.'s Request for Emergency Order Pursuant to Federal Power Act Section 202(c)1 ("Request") to the Secretary of the Department of Energy ("DOE") submitted on March 29, 2018.

INDIEC is an association of large energy users in the state of Indiana with an annual energy spend of \$894,000,000 and employing over 59,000 people. As such, the cost of energy is of major importance to the continued success of their industrial operations and INDIEC members have a substantial interest in keeping those energy costs as low as possible. Consequently, INDIEC is very concerned with FirstEnergy's Request because it will undermine the competitive market that exists in PJM and result in raising energy cost throughout the PJM footprint. INDIEC is also concerned that granting FirstEnergy's Request will impact the MISO market and other RTO's as well.

FirstEnergy's Request is premised on the erroneous notion that the proposed future retirement of three of FirstEnergy's facilities will undermine the reliability of the grid as a whole. There is no support for this allegation and, in fact, PJM is on record as stating that there is no immediate threat to system reliability.² Rather, the proposed retirements are the result of appropriate price signals reflecting that more expensive generation is being replaced by less expensive generation. This is how the markets should work.

¹ INDIEC joined in the protest of the PJM Consumer Representatives submitted April 5, 2018 to DOE.

² Letter of PJM Interconnection LLC to Secretary Perry dated March 30, 2018.

FERC received extensive comments from PJM and other stakeholders in response to the Secretary's proposed grid resilience pricing rule, which addressed most of the same arguments in FirstEnergy's Request. FERC found that the pricing relief requested was not justified.³ Instead, FERC has begun proceedings to provide further analysis of the issues raised by the proposed rule.⁴ FirstEnergy's Request is an attempted end run around FERC's January 8th Order.

Moreover, FirstEnergy's Request has not demonstrated an emergency exists. DOE regulations clearly state that economic factors relating to service are not considered emergencies unless there is an imminent inability to supply electric service. Consequently, FirstEnergy has failed to meet even the first criteria for seeking emergency relief, much less demonstrating that a reliability emergency exists.

Indiana is a manufacturing intensive state. Industrial operations in Indiana are already facing continued rising energy costs. Granting FirstEnergy's Request and forcing the PJM market to subsidize unproductive, noncompetitive generation facilities adds to rising energy costs and provides a disruption of the competitive wholesale markets. The long-term effect of granting FirstEnergy's Request would undermine the public's confidence in the markets. Further, if FirstEnergy's Request is granted, it could provide a precedent for other utilities to follow in other wholesale markets such as MISO, undermining all RTO markets.

For all of the above stated reasons, INDIEC requests that the Administration reject FirstEnergy's Section 202(c)1 Request and decline to take other action to interfere with retiring power plants.

Respectfully submitted,

Bette J. Dodd

Executive Director,

Indiana Industrial Energy Consumers, Inc.

⁴ *Id*. at pp 17-20.

³ See Grid Reliability and Resilience Pricing, 162 FERC ¶ 61,012 at pp 14-15 (January 8, 2018).

From:

Richard Miller

To:

<u>AskOE</u>

Subject:

FisrtEnergy"s 202(c) request

Date:

Friday, April 27, 2018 10:47:00 PM

Dear Sirs:

FirstEnergy's 202(c) request for a federal bailout is un-American. They have made loads of money by providing energy when we didn't know how to do it any other way. They made bad decisions for the future of their business. The American people don't owe them a pass for their bad decisions. They need to be allowed to go bankrupt as they deserve due to their bad decisions.

Best Regards,

Richard Miller

Fron:

Kim

To: Subject: AskOE Help save our Perry Nuclear Power Plant Jobs In Perry Ohio

Date:

Saturday, April 28, 2018 11:39:45 PM

President Thrump and Rick Perry please help our plant stay open 700 jobs our on the line (10) (10)

and our community will go

down hill fast taxes will soar business will shut done. You campaigned on coal and nuclear please help the plant just filed the other day with the NRC to start paper work for 2021 it will close it for good. I don't understand how they can file with NRC no decisions from your areahe yet. Our library will be cut police and fire departments cut it will bad if Perry closes please help save our job keep the plant open gird needs it security. Present Thrump please come up to the PerryPowrt Plant the workers need the moral. Thank you for your time.

Kim and Gary Godfrey (b) (6)

PS come to our Perry Nuclear Power Plant and tour it and give a speech please Mr. president.

Sent from my Verizon Wireless 4G LTE DROID





PJM Interconnection, L.L.C. 2750 Monroe Boulevard Audubon, PA 19403

Steven R. Pincus Associate General Counsel T: (610) 666-4438 l F: (610) 666-8211 steven.pincus@pim.com

April 30, 2018

The Honorable James Richard Perry Secretary of the Energy United States Department of Energy 1000 Independence Ave, SW Washington, DC 20585

Re: First Energy Solutions, Corp. Request for Emergency Order Pursuant to Federal Power Act Section 202(c) Submitted March 29, 2018

Dear Secretary Perry:

PJM Interconnection, L.L.C. ("PJM") respectfully submits to the Secretary of Energy (the "Secretary") additional new information to enhance the record and contribute the Secretary's understanding of the issues. This information supplements the Motion to Intervene and Limited Response filed by PJM on April 13, 2018 (the "Response"). PJM recognizes that fuel security raises questions about electric system resilience which go beyond reliability. Fuel security focuses on the risks of fuel supply and delivery to generators.

On April 30, 2018, PJM published "Valuing Fuel Security," setting forth the next steps of PJM's resilience initiative which is attached hereto and incorporated herein.² PJM is initiating a

¹ The Response included an attached report ("PJM's Report") giving PJM's perspective and response to a report issued by the National Energy Technology Laboratories ("NETL") on March 13, 2018 (the "NETL Report"). The PJM Report concluded that performance during the 2017/2018 cold snap is "evidence that the grid in the PJM service area remains strong, diverse and reliable." PJM Report page 10.

² Valuing Fuel Security found at: http://www.pjm.com/-/media/library/reports-notices/special-reports/2018/20180430-valuing-fuel-security.ashx?la=en ("Fuel Security Initiative").

process, starting immediately, to analyze fuel security vulnerabilities in an evolving generation fleet. The process will involve three phases:

- Identify system vulnerabilities and determine attributes such as on-site fuel requirements, dual fuel capability or others that ensure that peak demands can be met during extreme scenarios.
- Model those vulnerabilities as constraints in PJM's capacity market, similar to existing transmission constraints, allowing for proper valuation of needed attributes in the market.
- PJM would work with the U.S. Department of Homeland Security, the U.S. Department of Energy, the Federal Energy Regulatory Commission, states, stakeholders and others to ensure that the results are consistent with identified security needs in the PJM footprint, including service to key military installations and other identified security concerns.

PJM actively participated in the proceedings before the Federal Energy Regulatory Commission (the "Commission") on grid resilience. In response to the Secretary's proposed rule for final action,³ PJM submitted initial comments on October 23, 2017, ⁴ and reply comments on November 7, 2017, ⁵ in Commission Docket No. RM18-1-000 regarding the Secretary's proposal, both of which are incorporated herein by reference.

Then in response to the Commission's January 8, 2018, Order Terminating Rulemaking Proceeding, Initiating New Proceeding, and Establishing Additional Procedures, ⁶ PJM submitted comments in response to the Grid Resilience Order which are incorporated by reference herein. ⁷

³ The full text of the Secretary's proposal can be found at: https://energy.gov/downloads/notice-proposed-rulemaking-grid-resiliency-pricing-rule.

⁴ Initial Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule found at: https://elibrary.ferc.gov/idmws/file-list.asp?document-id=14612546 ("Initial Comments").

⁵ Reply Comments of PJM Interconnection, L.L.C. on the United States Department of Energy Proposed Rule found at: https://elibrary.ferc.gov/idmws/file list.asp?document id=14617934 ("Reply Comments").

⁶ Grid Resilience in Regional Transmission Organizations and Independent System Operators, 162 FERC ¶ 61,012 (2018) ("Grid Resilience Order"). In the Grid Resilience Order the Commission (1) terminated the proceeding regarding the proposed rule on Grid Reliability and Resilience Pricing submitted to the Commission by the Secretary that was focused on providing cost-of-service compensation to generators with on-site fuel capability, and (2) initiated a new proceeding under Docket No. AD-7-000 on Grid Resilience in Regional Transmission Organizations and Independent System Operators. The Grid Resilience Order directed each Regional Transmission

The Fuel Security Initiative builds off of PJM's published analysis of the reliability attributes associated with various potential future resource mixes. In the Fuel Report, PJM's analysis concluded that its bulk electric system could be operated reliably under an array of future supply portfolios. PJM is continuing now expeditiously to ensure fuel security as outlined in the Fuel Security Initiative.

In addition, PJM organized and sponsored two well-attended Grid 20/20 events, one on fuel diversity and resilience⁹ and the other on grid security and resilience.¹⁰ The April 2017 Grid 20/20 event facilitated a stakeholder discussion on fuel mix diversity and security issues and their intersection with resilience.

Finally, PJM has completed the 30-day analysis of the deactivation notice dated March 28, 2018, which PJM received from FirstEnergy Solutions Corp. on behalf of FirstEnergy Nuclear Generation, LLC (together referred to as "FirstEnergy Solutions") notifying PJM in the intent to deactivate certain nuclear units pursuant to PJM Open Access Transmission Tariff ("PJM Tariff"). In accordance with PJM Tariff, section 113.2, PJM notified FirstEnergy

Organization ("RTO") and Independent System Operator ("ISO"), including PJM, to submit initial comments and responses to the Commission on resilience in order to enable the Commission to holistically examine the resilience of the bulk power system.

⁷ Comments and Responses of PJM Interconnection, L.L.C. incorporated by reference and found at: https://elibrary ferc.gov/idmws/file-list.asp?document-id=14648921 ("PJM March 9 Comments").

⁸ PJM's Evolving Resource Mix and System Reliability (March 30, 2017) incorporated by reference and found at: http://www.pim.com/-/media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability (March 30, 2017), http://www.pjm.com/-/media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx?la=en.

⁹ See Grid 20/20: Focus on Resilience (Fuel Mix Diversity & Security), April 19, 2017 ("April 2017 Grid 20/20"), http://www.pjm.com/committees-and-groups/stakeholder-meetings/symposiums-forums/grid-2020-focus-on-resilience-part-1-fuel-mix-diversity-and-security.aspx.

¹⁰ See Grid 20/20: Focus on Security & Resilience, September 19, 2017 ("September 2017 Grid 20/20") incorporated by reference and found at: http://www.pjm.com/committees-and-groups/stakeholder-meetings/symposiums-forums/grid-2020-focus-on-security-and-resilience.aspx.

Solutions that the deactivation of these generating units is not expected to adversely affect the reliability of the PJM Transmission System due to a combination of remedial measures, including (i) accelerating the completion of existing baseline upgrades included in the Regional Transmission Expansion Plan ("RTEP upgrades"), (ii) timely completion of new RTEP upgrades, and (iii) implementing system redispatch measures. With these measures, the PJM Transmission system will remain reliable, and therefore the generating units listed above may plan to deactivate as scheduled, based upon the identified remedial measures. PJM posted additional information on the deactivation analysis for the subject nuclear generator units for the May 3, 2018 Transmission Expansion Advisory Committee which are incorporated herein by reference.¹¹

PJM respectfully submits that the forgoing inforantion and documents incorporated by reference will help clarify the record in this proceeding and contribute the Secretary's understanding of the issues.

Respectfully submitted,

/s/ Steven R. Pincus

Steven R. Pincus Associate General Counsel PJM Interconnection, L.L.C.

Craig Glazer VP, Federal Government Policy PJM Interconnection, L.L.C.

.Cc: Pat Hoffman, U.S. Department of Energy Catherine Jereza, U.S. Department of Energy Rakesh Batra, U.S. Department of Energy Katherine Konieczny, U.S. Department of Energy

¹¹ Generation Deactivation Notification Update, May 3, 2018, http://pjm.com/-/media/committees-groups/committees/teac/20180503/20180503-teac-generation-deactivation-notification.ashx

CERTIFICATE OF SERVICE

I hereby certify that I this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA this 30th day of April, 2018

/s/ Steven R. Pincus
Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Audubon, PA 19403
(610) 666-4370
steven.pincus@pjm.com



Introduction

Resilience describes a broad array of low-probability but high-impact risks at all stages of the production, transmission and distribution of electricity. PJM Interconnection is uniquely positioned to see the bigger picture of the many factors that affect the resilience of the grid. PJM now seeks to isolate one type of resilience risk: fuel security. Fuel security focuses on the vulnerability of fuel supply and delivery to generators and the risks inherent in increased dependence on a single fuel-delivery system.

In March 2017, PJM published an analysis of the reliability attributes associated with various potential future resource mixes.¹ PJM's analysis concluded that its bulk electric system could be operated reliably under an array of future supply portfolios. However, the scope of the analysis did not include the resilience of the system with various potential portfolios nor the risks associated with significant disruptive events.

As the paper noted: "Heavy reliance on one resource type, such as a resource portfolio composed of 86 percent natural gas-fired resources, however, raises questions about electric system resilience, which are beyond the reliability questions this paper sought to address."

As is the case with reliability standards, PJM believes the most effective way to address fuel security is to define and establish fuel security criteria and then use market forces to allow all resources to compete to meet those criteria. The PJM markets can provide excellent, fuel-neutral tools to value identified and verified fuel security attributes. Additionally, the PJM markets offer a competitive environment to deliver fuel-secure electricity in the most efficient and cost-effective manner to customers. The market can also send a price signal that works to incent investment in fuel-secure infrastructure.

This market signal can be used as one data point to assist in valuing various alternatives such as the benefits of new pipelines, the benefits of resources with on-site fuel and the value of new technologies that promote an array of fuel-secure resources. Market participants would respond to the signal with the most cost-efficient approach to ensure fuel security. The market-based approach outlined below can work to achieve a cost-effective, fuel-secure fleet of resources.

As defined by PJM, fuel security is the ability of the system's supply portfolio, given its fuel supply dependencies, to continue serving electricity demand through credible disturbance events, such as coordinated physical or cyberattacks or extreme weather that could lead to disruptions in fuel delivery systems, which would impact the availability of generation over extended periods of time. To define potential fuel-security criteria, PJM needs to understand the fuel-supply risks in an environment trending towards greater reliance on natural gas supply and delivery.

The goal is to identify triggering thresholds (such as a simulated loss of load) that indicate locations on the system where additional fuel security assurance is needed. PJM could then model those locations as constraints in the capacity market, just as PJM models transmission constraints today when determining the parameters that form the locational requirements in the capacity auction. As with transmission constraints, modeling fuel security would only

¹ http://pjm.com/-/media/library/reports-notices/special-reports/20170330-pjms-evolving-resource-mix-and-system-reliability.ashx?la=en

Valuing Fuel Security

result in price separation if the results demonstrate a constraint. Ideally, if analysis indicates the need for constraints, PJM would implement them by the May 2019 Base Residual Auction.

As a first step, PJM will perform targeted analyses to identify fuel security risks that could affect specific locations on the system (or depending on the nature of the fuel supply risk on the aggregate PJM system) and establish criteria to apply to existing market mechanisms in order to produce efficient and cost-effective results for customers. This document outlines the objectives for this study, defines the approach fundamentals, including assumptions, and establishes the timeline for completion.

Proposed Approach

PJM recognizes that assessing fuel security is complex and best tackled in phases. The first phase is to assess, via analysis, the scope of fuel security vulnerabilities and the development of criteria. The following phases would use the results of the first phase as input to determine the valuation of fuel security attributes. PJM anticipates overlap between phases as it continues to refine the analysis, criteria and methods for valuing fuel security.

<u>Phase I: Analysis</u> – Identify potential system vulnerabilities on a locational basis and develop fuel security criteria to address those vulnerabilities.

Phase I is intended to identify potential system vulnerabilities and to determine attributes such as requirements for amounts of on-site fuel and dual-fuel capability, among others, to ensure that peak demands can be met during realistic but extreme contingency scenarios in various supply portfolios.

As PJM concluded in its March 2017 report, PJM's current fuel portfolio is reliable, diverse and among the highest performing of those studied. It is well supplied with the required generator reliability attributes. The PJM system can remain reliable with the addition of more natural gas and renewable resources. However, an increased reliance on any one resource type introduces potential fuel security risks not recognized under existing reliability standards.

Such risks could include the deliverability logistics of fuel supplies during stressed conditions over time as opposed to more momentary interruptions that otherwise are considered through the procurement of reserves. The intent of Phase I will be to stress-test the system under various extended fuel supply disruption scenarios in order to better understand reliability outcomes resulting from the current capability of local onsite fuel and back-up fuel.

This is different from the objective of the Capacity Performance enhancements already implemented in the PJM capacity market. Capacity Performance ensures that individual resources are prepared to perform when the system needs them the most. The vulnerabilities that the Phase I analysis will identify and model as constraints may be beyond the ability of any individual unit owner to control through more secure fuel contracts or investment in particular units.

Valuing Fuel Security

<u>Phase II: Modeling</u> – Work through the PJM stakeholder process to incorporate vulnerabilities, on a locational basis, as constraints in PJM's capacity market (similar to PJM's modeling of transmission constraints today).

This would allow for the proper valuation of needed locational attributes as well as competition among resources that today or in the future can provide those attributes to ensure a resilient grid. The results of the Phase I analysis will be used in Phase II to help model constraints as part of the planning parameters in PJM's capacity market to help identify and value needed fuel security attributes at particular locations on the system.

Recognizing that the PJM region is large and diverse, generation located, for example, on top of a Marcellus shale field does not face the same fuel security issues as a generator more distant from supply and connected to a lateral pipeline served by a single natural gas distribution company. Similarly, delivery mechanisms for coal and oil differ across the region. For these reasons, PJM recommends starting with a locational analysis focused on specific fuel delivery vulnerabilities, which will differ depending on geography. These constraints would then be modeled in the capacity market along with existing and projected transmission constraints to ensure that each zone and sub-zone in PJM is able to maintain reliable service during a disruptive event that could last several days. As with transmission constraints, modeling fuel security would only result in price separation if the results demonstrate a constraint.

<u>Phase III: Ongoing Coordination</u> – Address any specific security concerns identified by federal and state agencies such as physical and cybersecurity hardening of critical assets that are cleared in the market.

In Phase III, PJM would work with the U.S. Department of Homeland Security, the U.S. Department of Energy, the Federal Energy Regulatory Commission, states, stakeholders and others to ensure that the results are consistent with identified security needs in the PJM footprint, including service to key military installations and other identified security concerns. Further, those facilities that clear as fuel-secure resources in the capacity market would need to assure regulators that they are "hardened" to address identified physical and cybersecurity threats and that the fuel system upon which those resources depend are similarly able to withstand identified physical and cybersecurity threats.

Assumptions

The following are a few high-level indicative assumptions that could be utilized for the analysis in Phase I:

- Generator forced, planned and maintenance outage rates (other than outages related to fuel supply) will be consistent with recent winters
- Oil-fired and dual-fuel generator withdrawals of oil and ease of replenishment will be modeled on a
 locational basis, taking into account the locational supply chain and contractual arrangements associated
 with such replenishments. PJM will study several different capacity supply portfolios under multiple different
 gas-availability scenarios.



- The study will be simulated under 2017-18 Cold Snap extended cold weather conditions and under 2014
 Polar Vortex loads and wind chill levels.²
- The study will be conducted for the RTO region and sub-regions.

Analysis Scenarios

PJM will create several capacity portfolio scenarios for the purposes of the study. They include:

- Base Portfolio: This scenario includes the 2020-21 PJM resource portfolio with scheduled retirements in addition to other retirements in order to have the Installed Reserve Margin (IRM) equal the approved value of the 2017 PJM Reserve Requirement Study of 16.6 percent.³
- Stressed Portfolio: This scenario includes the base portfolio scenario along with additional coal and nuclear retirements.
- High-Stressed Portfolio: This scenario includes the base scenario along with an assumption that
 an increased percent of coal and nuclear are retired and replaced with natural gas within the same zone as
 the retired resources.

Disruptions

PJM will simulate disruptions to fuel delivery systems that could be the result of credible extreme events such as coordinated physical or cyber-attacks, extreme weather, etc. The following is a description of the disruption scenarios:

- No disruptions; generators have access to supply throughout the winter, subject to current pipeline capacity.
- Reduction of a realistic percentage of delivery capability on particular constrained portions of pipelines in the PJM region. This would address the potential for a significant disruptive event to degrade the pipelines' ability to deliver to a set of generating units.
- In addition to reduced supply availability over longer periods, study a few realistic but extreme contingencies such as a force majeure event on key delivery facilities.
- In addition to reduced gas availability, analyze other fuel supply disruptions.

Each of these disruptions will be applied to the three capacity portfolio scenarios described above.

² http://www.pjm.com/-/media/library/reports-notices/weather-related/20180226-january-2018-cold-weather-event-report.ashx

³ http://www.pjm.com/-/media/committees-groups/committees/pc/20171012/20171012-item-03a-2017-pjm-reserve-requirement-study.ashx



Anticipated Outcome

PJM anticipates completing the study within the next several months. The results will be discussed with PJM stakeholders and state and federal agencies.

PJM intends to use the study results to define (if analysis indicates they are necessary) specific fuel-security criteria that could be implemented as constraints in the capacity market for application in the next possible Base Residual Auction. These constraints will be defined in a fuel-neutral manner, such that all resources are able to compete to meet them. Including such criteria in the capacity market modeling would ensure that the capacity market commits resources based on the least-cost set that ensures resource adequacy including fuel security considerations.

Approach Rationale

PJM believes the most effective way to address fuel security is to define and establish fuel security criteria and then use market forces to allow all resources to compete to meet those criteria. The competitive markets remain the best mechanism to use to meet the needs of maintaining a reliable and fuel-secure system at the lowest reasonable cost to consumers. Establishing the criteria and constraints proactively will allow them to be modeled in the capacity market before the PJM system is at a point where the constraints could be violated. By doing so, the market construct will be prepared and configured to recognize these constraints if and when they do arise, so that the market can commit resources on the basis of those constraints. Moreover, using the existing market constructs is expected to limit significantly the number of instances where out-of-market actions are necessary.

PJM looks forward to working with stakeholders, federal and state agencies on further developing the incorporation of fuel security criteria into its markets going forward.

Proposed Timeline

Acknowledging that valuing fuel security is a complex effort, the proposed approach attempts to organize the effort in incremental phases. The phases are not necessarily contemplated to be sequential and PJM acknowledges that there will be overlap between the phases as we collect feedback and work through the stakeholder process. PJM proposes the following timeline:

- Phase I, initial analysis, completed in 3-4 months
- Phase II completed in 4-5 months
- Phase III ongoing

These phases and timeframes will be fluid and dynamic. Ideally, if analysis indicates that fuel security constraints are necessary, they would be implemented by the May 2019 Base Residual Auction.

Stakeholder Feedback

PJM welcomes stakeholder feedback regarding the scope of this analysis. To that end, PJM will schedule a special MRC conference call in the near future to garner stakeholder feedback on this plan. Of course, protections, including those addressed through PJM Critical Electric Infrastructure Information rules, would be needed to shield the exact input and results of that modeling to prevent vulnerabilities from being publicly released. PJM is prepared to work with the Federal Energy Regulatory Commission and stakeholders to develop appropriate mechanisms to achieve appropriate transparency.

From:

terry bohinc

To:

<u>AskOE</u>

Subject: Date: PMJ comments especially for Ohio review Tuesday, May 01, 2018 12:02:37 PM

Conversion of nat gas generation because of cost and environmental considerations should include analysis of following.

- [1] Generation using renewables of hydrogen which is then inserted in nat gas storage facility to make higher content BTU gas. Outcome is more efficient generation from nat gas facilities. Also provides use of off peak available power from renewables. These kinds of systems are being stood up in Canada and Gr and is cutting edge advantage increasing value of renewables and good solution for highest energy backup supplies
- [2] Related issues is to encourage nat gas generator operators to add additional new tech CO2 capture systems on output. This could start move to 90% plus performance reductions regarding CO2 getting very near nuclear without the costs and lingering issues. This approach is very interesting for Ohio as the new gas generators are very near Utica and Marcellus producing wellheads and CO2 could easily be concentrated and injected back into field
- [3] These are new tech suggestions but DOE/ PMJ analysis projecting out 2-5 years make all reasonable and decisions should provide path to encourage adoption rather than simply rely on low probability risk as excuse for maintaining high cost backups

 Jerry Bohinc

(b) (6)

cell

Gates Mills, Ohio 44040

International Brotherhood of

BOILERMAKERS • IRON SHIP BUILDERS

753 State Avenue

NEWTON B. JONES
INTERNATIONAL PRESIDENT
SULTE 570
913-371-2640
FAX: 913-281-8101



BLACKSMITHS • FORGERS & HELPERS

Kansas City, Kansas 66101-2511

WILLIAM T. CREEDEN INTERNATIONAL SECRETARY-TREASURER SUITE 565 913-371-2640 FAX: 913-281-8102

February 21, 2018

President Donald J. Trump The White House 1600 Pennsylvania Avenue, NW Washington, DC 20050

Dear President Trump,

On behalf of the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers (Boilermakers), I write to urge action by your administration, through the Department of Energy (DOE), to use emergency powers to avoid the imminent closure of critical coal and nuclear power plants. Hundreds of coal-fueled generating plants have closed over the past several years due to lower natural gas prices and stringent EPA regulations. Some nuclear units are at risk because they cannot recover their costs under current electricity market rules, leaving some states struggling to ensure their economic viability.

Recently, the Federal Energy Regulatory Commission (FERC) rejected a proposed rule by DOE to provide full cost recovery for coal and nuclear units operating in competitive power markets. This rule would have helped to ensure fuel diversity and resilience of the electric power grid by correcting competitive electricity markets in the way that power producers are compensated. DOE's proposed rule recognized that baseload coal and nuclear plants provide unique benefits to the electric grid due to the security of their "on the ground" fuel supplies and their inherent stability and reliability.

Unfortunately, the lack of action by FERC has now left too many of these coal and nuclear power plants vulnerable to imminent retirement. These plant closures will certainly result in further strain on the electric grid and reliability - not to mention the detrimental effects on the communities that these plants support through a strong tax base and steady employment, including thousands of highly-skilled Boilermakers who construct and maintain these coal and nuclear units.

Too many baseload power plants have already closed in recent years. The premature retirement of many more due to outdated market rules will further undermine electric reliability, affecting consumers, manufacturing industries, and high-tech businesses. Once these baseload power plants close, they do not reopen.

FERC's refusal to address this problem as proposed by DOE has left few alternatives and, in our view, requires immediate, corrective action by DOE.

I urge you to direct DOE Secretary Perry to use his emergency authority to intervene in this serious situation to prevent the further closure of coal and nuclear baseload generators.

Sincerely,

Newton B. Jones International President

cc: Hon. Rick Perry, Secretary, Department of Energy U.S. International Vice Presidents



Tishekia E. Williams Assistant General Counsel, Regulatory 411 Seventh Avenue Mail drop 15-7 Pittsburgh, PA 15219 Tel: 412-393-1541 Fax: 412-393-5757 twilliams@duqlight.com Document 131

May 1, 2018

VIA OVERNIGHT MAIL AND EMAIL

The Honorable James Richard Perry Secretary of Energy U.S. Department of Energy 1000 Independence Avenue, S.W. Washington, DC 20585

Bruce Walker
Assistant Secretary,
U.S. Department of Energy
Office of Electric Delivery and Energy Reliability
1000 Independence Avenue, S.W.
Washington, DC 20585

Catherine Jereza
Deputy Assistant Secretary
U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability
1000 Independence Avenue, S.W.
Washington, DC 20585

Re: FirstEnergy Solutions Corp. March 29, 2018 Request for Emergency Order Duquesne Light Company's Motion to Intervene

Dear Secretary Perry, Assistant Secretary Walker, and Deputy Assistant Secretary Jereza:

It has come to Duquesne Light's attention that language in its "Motion to Intervene," filed April 11, 2018, may be misconstrued. To clarify, Duquesne Light did not intend to take a substantive position regarding FirstEnergy Solutions' 202(c) application at this time. Simply, Duquesne Light's position is that the company and its customers could experience reliability impacts and changes in energy, capacity and transmission costs by FirstEnergy Solutions' application, and requests full party rights to protect its interests.

Respectfully Submitted,

Tishekia E. Williams
Attomey ID#208997

East Penn Manufacturing Co. P.O. Box 147, Deka Road, Lyon Station, PA 19536-0147 Phone: 610.682.6361, Fax: 610.682.4781

www.deitabatteries.com

Document 132

President Donald J. Trump The White House 1600 Pennsylvania Avenue NW Washington, DC 20500

RE: Request for Emergency Order By FirstEnergy Solutions Corp. Under Federal Power Act Section 202(c)

Dear Mr. President:

April 13, 2018

East Penn Manufacturing vigorously opposes FirstEnergy Solutions Corp.'s Request to the Department of Energy for issuance of an Emergency Order under Section 202(c) of the Federal Power Act.

Granting the Request would undermine the competitive forces at play in wholesale electricity markets and directly undercut the tremendous economic advantage of the Marcellus and Utica natural gas shale plays in the United States. American companies and consumers would be unnecessarily subjected to higher energy bills if the Request were to be granted.

East Penn Manufacturing has thirteen facilities in the PJM region. East Penn employs 7,427 and provides economic benefits to Illinois, Indiana, Kentucky, Maryland, Ohio, Pennsylvania, Virginia, and West Virginia and to America. Energy prices are a significant portion of East Penn Manufacturing operating costs. As you know, higher energy and regulatory costs threaten the competitiveness of American industries, manufacturers, producers, and large industrial users of energy like East Penn Manufacturing.

There is no looming emergency in the PJM region. Very healthy electricity capacity reserves are available throughout the region that is targeted by the Request. Mechanisms and standards are in place to ensure reliable delivery of electricity. Energy prices are currently reflecting lower prices for natural gas and other electric generation fuels. An emergency order from the Department of Energy would be unnecessary and unlawful.

If granted, FES's Request would unnecessarily raise energy prices for consumers and directly undercut the tremendous economic advantage of U.S. natural gas shale plays. Energy prices are currently reflecting lower fuel prices.

On behalf of East Penn Manufacturing, I strongly recommend that the Request be denied.

Respectfully,

Christy Weeber Senior VP Finance

East Penn Manufacturing

Alceber

c: The Honorable James Richard Perry, Secretary, Department of Energy

From:

Ellman, Martin F

To:

AskOE

Subject:

Pro Diversified Energy Portfolio and National Energy Policy inclusive of Nuclear and Coal

Date:

Tuesday, May 01, 2018 12:21:31 PM

Attachments:

image001.png

(b)(6)

..... Our country needs a Fully Diversified

Energy Portfolio and National Energy Policy inclusive of Nuclear, Coal, Gas, Hydro, Wind, Solar, Energy Storage, and Other Renewables to be as strong and independent as we can be with respect to Reliability, Security, Economic Stability, Stewardship of our Resources for our children and their children and grandchildren, etc.. NG is a very precious and useful natural resource used as a primary feedstock in our chemical and manufacturing facilities, for power generation, and as a primary fuel to heat our homes, we need to continue to expand our NG exploration and use for sure, but treat it as so, and in addition not rely on it as our primary power generation source. I'm a proponent of all of the above fuel sources and technologies and our ability to advance their use responsibly, not picking ones over others but picking them all, and above all making them all work for us. So I ask you all involved in these very important policy decisions to not think small, think big picture.

Martin F. Ellman, P.E. CEM, DGCP

Sr. Project Manager

Power/Energy Division



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The contents of this email do not necessarily represent the views or policies of Middough.

Document 134

From:	

John Langkam

To:

<u>AskOE</u>

Subject:

Nuclear and coal fire plants

Date:

Tuesday, May 01, 2018 8:41:19 AM

Attachments:

image()()1.jpg John Langkam.vcf

A capital market lets economics decide what will survive and what will not. Let the economics do their part without subsidies.

Thank you,		
John Langkam		
OCCUPATION AND ADDRESS OF THE PROPERTY OF THE	(artist)	
The state of the s		
The state of the s		

From

Mike Murphy

To:

<u>AskOE</u>

Subject: Date: FirstEnergy Bailout Request

Tuesday, May 01, 2018 5:27:43 PM

To Whom It May Concern:

FirstEnergy's federal bailout request poses a serious threat to competitive, clean energy.

FirstEnergy's attempt to block the sun and stop the wind present an existential threat to our future.

DENY FirstEnergy's Request!

Michael F. Murphy (b) (6)